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ABSTRACT

This paper reports on a study of teenage sexual activity and pregnancy in Utah, conducted to understand ways of dealing with the State's rising adolescent fertility rate. The paper identifies social and cultural characteristics which distinguish sexually active youth from their abstinent peers. Related research is reviewed and methodology is described: 254 interviews were conducted, including 199 with students randomly drawn from twelve Utah high schools, and 55 with girls who were presently or formerly pregnant. Results are organized under these response categories: (1) response and completion data; (2) intercourse experience, reasons, and age; (3) demographic characteristics; (4) friend, peer, and dating relations; (5) family relations; (6) school background and achievement; (7) religious and responsibility orientations; and (8) sexual education and attitudes. The following section compares the attitudes and experiences of non-sexually active males and females to those of their sexually active peers. Family relations are discussed as one domain where particularly significant differences were found (sexually active girls are said to be more likely to have strained families than sexually active boys). Other important factors are said to be age at initiation of dating; feelings of responsibility to other people and institutions; and the source, age, and effectiveness of sex education. Finally, survey limitations are considered and recommendations, derived from interviews with teachers of young mothers' programs, are offered. Appendices include questionnaires and other materials used in collecting and analyzing data. (KH)

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TEENAGE PREGNANCY

A Comparison of Certain Characteristics among Utah Youth

Utah State Office of Education

August 1981

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TEENAGE PREGNANCY

A Comparison of Certain Characteristics Among Utah Youth

A Research Report Prepared for

The Utah State Office of Education

G. Morris Rowley, Project Monitor

(pursuant to USOE contract No. 81-0385)

by

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FOREWORD

The Governor's Statistical Task Force, commissioned as part of the Utah International Year of the Child, reported that the births to teenagers arose from 3,346 to 4,200 between the year 1970 and 1976. The report continues:

> Out-of-wedlock pregnancies to teenagers have increased from 400 in 1960 to 750 in 1976. In 1975 Utah had 31,667 live births; 3,177 were to teenagers, and 674 were illigitimate births. So the illigitimacy rate of Utah teenagers was about 18 percent.

Statistically, Utah's rate of illigitimate teenage pregnancy is less than half that of the nation. Nevertheless, the trend is up; and the pattern of increase corresponds to that of the nation. This report recommends that further study be conducted to clarify not only the data, but the causes.

The study here reported makes a comparison between sexually active and sexually non-active teenagers in such areas as family relationship, school success, values, and religious background. It is hoped that a comparison of these characteristics will provide some leads in the development of school programs, family activities, and services of religious and public agencies designed to reduce the incidence of sexual activity among teenagers out of wedlock and, hence, to reduce the incidence of unwanted pregnancy among teenagers.

The study was conducted for the Utah State Office of Education by a team of researchers in the Departments of Family and Human Development and Home Economics and Consumer Education at Utah State University. Dr. Brent C. Miller was chief investigator. He was assisted by

Dr. Glen O. Jenson, Mrs. Mary N. Krueger, Dr. Tom C. Peterson, and Dr. Anne M. Weiner. Appreciation is expressed to these people for their efforts and for their contribution in this important area of investigation.

Walter D. Talbot
State Superintendent of
Public Instruction

PREFACE

HISTORY

Concern about strengthening families through education has been long standing with the Utah State Board of Education. This concern became more acutely focused in response to alarm expressed by the State PTA officers in about 1970. It centered around increased divorce rates, child abuse and neglect, teenage pregnancy, and the apparent general erosion of the traditional family. The State Board of Education instructed its staff to take appropriate steps to provide education designed to help alleviate these problems.

In 1977 the Legislature, upon recommendation of the State Board, took an interest in strengthening families through education and appropriated funds to finance education programs in this area. Also, the State Board adopted new high school graduation requirements, one of which was that responsible parenthood programs must be offered in each Utah high school. Parallel to this, the State PTA conducted a survey requesting parent opinion as to the extent to which the school should be involved in parenthood education and what should and should not be included in the curriculum. This provided the state committee some guidance from the grass roots. Thus, public awareness of the need for parenthood education was increased, and the demand by individual schools and school districts for assistance in developing or modifying parent education programs were enhanced.

Some 15 projects, ranging in content from one-year courses to a variety of experiences for students, K-12, were designed and offered for

dissemination throughout the state. These programs tended to address child growth and development and skills in managing a family as an organization and an enterprise.

In the meantime, the tragedy and difficulty resulting from unwanted pregnancy among teenagers continued. The specter of off-guard, unmarried, unprepared girls finding themselves pregnant; of the repeated story of inadequate, sometimes non-existent prenatal care; of youngsters who were physically unable to deliver expected babies; of young fathers unwilling and unprepared to accept parental responsibility; of young girls unequal to the task of rearing a child alone and without resources was all too frequent. In short, the situation creates a three-sided tragedy in the lives of youth, their parents, and the resulting children. There are also the matters of a disrupted school program, radically modified life plans, and a need for education to accommodate young people who have already found themselves in this situation.

Parallel to the education-for-responsible-parenthood programs sponsored by the State Board of Education, there was a series of "young mothers" programs developed in response to the increasing number of pregnant teenagers. Typically, these programs took girls out of the regular school program, placed them in a different educational setting, provided curriculum which would eventually result in their graduation, and, in addition, gave help to them in rearing their children. These were programs dealing with the problem created by teenage pregnancy, not with prevention of the problem.

Again and again questions arose such as, "Is it possible to prevent unwanted teenage pregnancy?" "If so, what is the role of the school system?" "Who should bear primary responsibility?" "Who has auxiliary

responsibilities?" Nationally, the most popular, and almost universal, solution to such questions was to increase sex education in the schools and provide girls with contraceptive devices and teach them how to use those devices. There is not much said in the national literature about the basic solution--that is, encouraging young people to refrain from sexual activity before marriage. It is as if that possibility were considered inadequate and totally impractical. Some people, in Utah, particularly, and elsewhere in the country feel otherwise. But, information is scarce about the nature of young people who indulge in premarital sexual activity as opposed to those who do not; and little is known about the difference between the two groups in such items as home life, parent-child relationships, family interactions, personal and spiritual values, and school success or failure.

PURPOSE

It was the intent of this study to attempt a comparison in the areas just mentioned between sexually non-active and sexually active teenage girls and boys with the hope that the comparison would yield information about differences in home life, parent-child relationships, school success or failure, religious training, and so forth. It was further hoped that these comparisons would suggest steps that might be taken by parents, school personnel, clergy, and others who desire to equip youth with the needed understanding, decision-making powers, and values so that they may make rational judgments about becoming sexually active. The study was conducted in the belief that young people so educated would be able to project consequences and at least make an intelligent choice as to whether or not to risk those consequences before indulging in activities that may result in pregnancy.

RELATIONSHIP TO STATE GOALS

Responsible Parenthood. In 1972, at the request of the State PTA, the State Board of Education approved a program for responsible parenthood. Responsible parenthood has since then been one of the important programs of the State Board and its staff. The relationship between this study and the responsible parenthood program is described above.

Individualized Instruction is one of the official goals of the State Board of Education. The Board's intent is to accommodate the special needs of all students. This concept recognizes that there are many groups which need special consideration and proposes program adjustments to accommodate special student needs. One of these special groups is comprised of students who experience unwanted pregnancies. For these students, regular, normal school routines and studies are severely interrupted; home life changes; self-image is often damaged; and many other unexpected contingencies arise from circumstances in which they find themselves--all of which suggest the special needs of this group. This study provides information which can lead to prevention of these circumstances.

Legislated Curriculum. The Legislature has said, "Persons employed to give instruction are to give special emphasis to common honesty; morality; courtesy; obedience to the law; respect for the Constitution of the United States and the Constitution of the state of Utah; respect for parents and home; the dignity and necessity of honest labor; and other skills, habits, and qualities of character which will promote an upright and desirable citizenry and will better prepare our youth for a richer, happier life." Obviously, this study responds to that legislated policy.

The Joint Appropriations Subcommittee on Public Education of the 1976 Legislature declared it to be the intent of the subcommittee that increased

emphasis be given to a program in secondary schools that will better qualify young people to cope with social and economic problems of parenthood. (January 23, 1976, minutes of the subcommittee) The relationship of this study and the intent herein expressed by the Legislature is obvious.

INFERENCES

For Parents' Consideration:

If parents wish to influence teens in the direction of refraining from sexual activity until after marriage, they will develop the necessary competencies to:

1. assume a major role in providing sex education to their children in the context of their own values;
2. manage family activities so that early dating will be less compelling;
3. support wholesome same-sex friendships;
4. support young people in developing appropriate opposite-sex friendships;
5. maintain parent-youth communication and open, honest interpersonal relationships;
6. maintain consistent discipline;
7. support optimum scholarship and maintain genuine interest in student school success;
8. plan and dream together (parent and youth);
9. encourage participation in spiritual training in the religion of their choice;
10. in the context of family values, assist youth to deal with problems related to premarital intimacies, going steady, necking, petting, and sex activities;
11. encourage high, but attainable scholastic, career, personal, and spiritual goals for each child;

For Educators' Consideration:

1. offer to parents competently taught courses in how to guide youth in matters of sexuality;
2. avoid activities or programs which encourage early dating;
3. provide educational programs which create the need for rational thinking, problem-solving, decision-making, interpersonal relationship, communication skills, and other fundamental skills; the thought here is to assist students to project consequences of their behavior and acquire the ability to make decisions based on rational judgment; to interrelate with other students in wholesome ways; and be able to communicate effectively personal needs, desires, and values in terms of the important decisions they need to make;
4. attend to individual differences and create a success-oriented curriculum (not a watered-down curriculum, but one which demands mastery at the level of capability of each student);
5. follow guidelines already adopted by the State Board of Education which deal with teaching about sex;
6. keep close liaison with the home; team with parents, especially those whose children need special help;
7. establish cooperative relationships with the clergy and with social and governmental agencies; develop and implement appropriate roles for each and coordinate efforts;
8. demand high, but attainable scholastic standards; assist in developing and moving toward valid career, citizenship, scholastic, and personal goals; help students to determine their personal aspirations.

For Religious Leaders' Consideration:

1. provide training to parents in the context of family's faith in such matters as dating and various forms of intimacy before marriage;

2. help parents develop their skills in consistency of appropriate discipline and in maintaining healthy parent-child relationships; define moral limits and personal responsibility to each other, to parents, and to God;
3. encourage aspirations of scholastic and life success; help youth establish high, but attainable goals in all facets of life;
4. provide opportunities, not only to hear but to practice the tenets of their faith.

Although the study does not specifically point out the need, the profile suggests that there is great need for cooperation among various groups within this society who have an interest in normal, healthy development of youth. Someone--perhaps school personnel--should take leadership in developing cooperative efforts to more specifically define the role of schools, the home, churches, and other agencies within the society so that they complement each other, correlate efforts, and create an atmosphere conducive to reducing the incidence of premarital sexual activity among teenagers.

ACKNOWLEDGEMENTS

The study was initiated through the concern and interest of G. Morris Rowley, Office of Special Projects, Utah State Office of Education. The contractors wish to thank Mr. Rowley, who served as the project monitor, for making the study possible. The investigators also wish to thank Dr. Joan R. McFadden, Dean of the College of Family Life at Utah State University, for organizing the research team and for providing financial support that enabled the study to get underway before USOE funding became available. Appreciation is also expressed to a dedicated corps of interviewers who skillfully arranged for and conducted the personal interviews, and to the parents and adolescents who willingly cooperated with them.

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I. Introduction

A. Background of the Problem

Adolescent prenancy in the United States has become a national concern. In recent years there have been over a million pregnancies annually to girls 19 or younger (United States, 1980), and approximately one third of these pregnancies end in abortion (Tietse, 1978). The personal and social costs of teenage fertility--for the child, the teen parent(s), grandparents, and society--have been widely acknowledged (Cara and Wise, 1978; Freedman and Thornton, 1979; McKenry, Walters and Johnson, 1979; Nye and Lambert, 1980). To assist in understanding and preventing adolescent pregnancy, the Office of Adolescent Pregnancy Programs (established by Congress in 1978) began funding services and prevention projects in 1979.

There is particular cause to be concerned about teenage pregnancy in Utah. Rates of teen pregnancy and fertility in the United States declined during the 1970's while these rates in Utah increased by almost one-third (Utah Department of Health, 1980). When the decade of the 1970's began, Utah was below the national average in adolescent fertility, but as the 1980's begin, Utah is considerably above the national average (see Table 1). The Bureau of Health Statistics, Utah Department of Health, recently reported that Utah has the 3rd highest rate of white teenage fertility in the country (Utah Department of Health, 1980, page 8). *

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* What appear to be remarkably high teen fertility rates in Utah need to be interpreted with some cautiousness. In the first place they should be seen in the context of a very high fertility subculture; Utah has exceptionally high fertility rates at all age levels. Secondly, fertility rates include births to those who are married as well as the unmarried, and Utahans marry nearly a year earlier than the national average. Thirdly, pregnancies among teenagers are more often carried to term in Utah. Nationally about one out of three teen pregnancies end in abortion whereas this proportion is about one out of seven in Utah.

TABLE 1

TEEN-AGE FERTILITY, 15-19 YEARS OF AGE: UTAH AND UNITED STATES, 1969-1978

	Utah				U.S.			
					All Races		White	
Year	Female[2] Population	Live Births	Fertility Rate[1]	Annual Percentage Change	Fertility Rate[1]	Annual Percentage Change	Fertility Rate[1]	Annual Percentage Change
1978	63,627	4,377	68.8	3.3	N.A.	. .	N.A.	. .
1977	63,552	4,233	66.6	8.3	53.7	.4	44.6	. .
1976	63,476	3,901	61.5	4.4	53.5	-5.0	44.6	-4.7
1975	63,401	3,736	58.9	2.1	56.3	-3.1	46.8	-3.1
1974	62,399	3,599	57.7	-0.9	58.1	-2.7	48.3	-2.0
1973	61,397	3,576	58.2	1.0	59.7	-3.7	49.3	-3.7
1972	60,396	3,480	57.6	2.9	62.0	-4.2	51.2	-4.8
1971	59,394	3,327	56.0	-1.8	64.7	-5.2	53.8	-6.2
1970	58,392	3,327	57.0	12.2	68.3	3.3	57.4	4.0
1969	57,390	2,916	50.8	. .	66.1	. .	55.2	. .

[1]Fertility rate is per 1,000 females, 15-19 years of age.

[2]Utah total teen-age population estimates are from Yun Kim, N. MacFarlane, K. Oki, Projection 3, Population Projections for Utah by Age and Sex, 1970-1985, Dept. of Sociology, Ut. St. Univ., Logan, Ut.

Bureau of Health Statistics
Utah State Department of Health
March 10, 1980, ML:mw

(See interpretive footnote on page 1.)

B. Rationale of the Research

Given the high rates and increasing trend of adolescent fertility in Utah, it would be desirable to identify patterns or profiles of the young people involved. Such information would be potentially useful to parents, educators, religious and civic leaders. Adolescent youth who become involved in pregnancy obviously have been sexually active and ineffective contraceptors. Males are implicated in this problem too: what are characteristics of males and females who become sexually active and experience sexual intercourse during their adolescent years? One could ask why sexually active young people are not more effective users of contraception, but the prior question is, "why do some young people become sexually active?" Are there any distinguishing characteristics which set them apart from abstinent youth in their peer, family, school, or religious background? These are the kinds of questions that the present research was designed to answer.

C. Review of Related Literature

Although teenage prenancy has received concerted research attention only in recent years, a number of excellent reviews are already available. Most provide general surveys of the issues (McKenry et al., 1979) or focus on adolescent sexuality per se (Chilman, 1980a; Gordon and Scales, 1980). In addition, some professional journals have devoted special issues to teen pregnancy and parenting (Family Planning Perspectives, 1978, 10, 4; Journal of Social Issues, 1980, 36, 1).

There are relatively few adequate studies comparing pregnant adolescents with non-pregnant peers, however, and their findings are limited and tentative. One team of investigators developed a profile of "pregnancy susceptibility," but unfortunately their analyses were based only on indigent adolescents who visited clinics (Goldfarb, Mumford, Schum, Smith, Flowers, and Schum, 1977). Although probably not entirely applicable, their findings suggest interesting leads: "an indigent teenager who comes from a large family, has received sex education late and from an acquaintance, and whose academic performance is poor or disrupted would seem a likely candidate for an unplanned pregnancy...The likelihood of an unplanned pregnancy for such a girl is thousands of times greater than the likelihood for an indigent teenager who comes from a small family, has attained normal grade level, and has received her first sex education early and at home" (Goldfarb, et. al., 1977, p. 137).

Findings of the study just referred to (school achievement for example) are supported by some investigators (Hansen, Stroh, and Whitaker, 1978), but not supported by others (Crovitz and Hayes, 1979). Additional studies report that family background characteristics of pregnant and nonpregnant adolescents are quite different (Brandt, Kane, and Moan, 1978) and still others suggest that the characteristics of the teen dyadic relationship itself are more predictive of pregnancy than either peer or family relations (Jorgenson, King, and Torrey, 1980).

Adolescent sexual intercourse, which might or might not result in pregnancy, is a closely related and logically prior area of research to adolescent pregnancy. Chilman (1980b) has recently summarized research on this subject as part of her review of adolescent childbearing in the 1970's. Both of Chilman's reviews (1980a, 1980b) are far more comprehensive than can be presented given the limitations of the present study. Consequently, Table 2 has been borrowed from Chilman (1980b); it is a distillation, by sex, of the situational, psychological, and biological factors that have been found in numerous studies to be linked to nonmarital intercourse among adolescents.

In the Utah cultural context some of the characteristics displayed in Table 2 seem more salient than others in addressing this issue. For example, religiousity, peer group pressure and permissiveness, use of drugs and alcohol, low self esteem, low educational goals and attainment, and strained parent-child relations are all areas that have been repeatedly emphasized in discussions with persons who are concerned with and informed about this topic in Utah. By contrast, race and racial prejudice, for example, are not likely to be very explanatory variables in Utah, which had only a five percent nonwhite population in the 1980 census.

While much can be learned from reviews of the existing literature, many of the adolescent studies elsewhere have come from clinic, indigent, or nonwhite populations. It is an empirical question how well the findings of studies conducted elsewhere will apply to adolescents in Utah.

Table 2

SUMMARY OF MAJOR FACTORS APPARENTLY ASSOCIATED WITH NONMARITAL INTERCOURSE AMONG ADOLESCENTS

Factors	Males	Females
Social Situation		
Father having less than a college education	unknown	yes, for blacks
Low level of religiousness	yes	yes
Norms favoring equality between the sexes	probably	yes
Permissive sexual norms of the larger society	yes	yes
Racism and poverty	yes	yes
Migration from rural to urban areas	unknown	yes
Peer-group pressure	yes	not clear
Lower social class	yes (probably)	yes (probably)
Sexual permissive friends	unknown	unknown
Single-parent (probably low-income) family	unknown	yes
Psychological		
Use of drugs and alcohol	yes	no
Low self-esteem	no[a]	yes[a]
Desire for affection	no[a]	yes[a]
Low education goals and poor educational achievement	yes	yes
Alienation	no[a]	yes[a]
Deviant attitudes	yes	yes
High social criticism	no[a]	yes[a]
Permissive attitudes of parents	yes[a]	yes[a]
Strained parent-child relationships and little parent-child communication	yes	yes
Going steady; being in love	yes[a]	yes[a]
Risk-taking attitudes	yes[a]	yes[a]
Passivity and dependence	no[a]	yes[a]
Aggression; high levels of activity	yes	no[a]
High degree of interpersonal skills with opposite sex	yes[a]	no[a]
Lack of self-assessment of psychological readiness	no[a]	yes[a]

(Continued on next page)

Table 2 (Continued)

SUMMARY OF MAJOR FACTORS APPARENTLY ASSOCIATED WITH NONMARITAL INTERCOURSE AMONG ADOLESCENTS

Biological		
Older than 16	yes	yes
Early puberty	yes	yes (probably for blacks)

[a]Variables supported by only one or two small studies. Other variables are supported by a number of investigations. The major studies on which this table is based are: Furstenberg (1976); Jessor and Jessor (1975); Sorenson (1973); Kantner and Zelnik (1972); Udry et al. (1975); Simon et al. (1972); Zelnik and Kantner (1977); Fox (1980); Cvetkovich and Grote (1975); Presser (1978).

Source: Chilman, 1980b

II. Methods of Procedure

A. Design Overview

The study was originally designed as a survey of the teachers of young mothers programs and adolescent girls who had and had not been pregnant. Trained interviewers were to have conducted face to face interviews in the schools. However, even with the state superintendent endorsing the project, several superintendents in districts that had been sampled "respectfully declined" to participate in the study. There were objections to selectively calling only the sampled students out of class, and also to the kinds of questions that needed to be asked in order to do the study. When it became apparent that a random sample could not be obtained by working within the schools, the study design was changed considerably. It was decided that interviews would have to take place away from the schools, probably in the homes of students and with parental consent.

After deciding to work outside the schools for data collection, the study design was also broadened to include a sample of adolescent males as a parallel to the study of adolescent females. It was considered desirable to also interview male adolescents, both those who had and had not been sexually active.

In addition to the interviews of both male and female students, a sample of the teachers of young mothers programs in the state were interviewed to obtain their insights and impressions about the

characteristics of adolescents who become involved with pregnancy during their teens.

B. Protection of Human Subjects

Safeguarding the rights of those who were interviewed was a concern in this research. The original proposal was submitted to Utah State University's Institutional Review Board (IRB), which is charged by the federal government with reviewing and evaluating projects which involve human subjects. Utah State's IRB had two concerns about the original proposal. The first was that the confidentiality and anonymity of sexual partners (to have been named by the pregnant girls) should be maintained. The second was that the selection process would minimize labeling of those interviewed in the school study. Both of these concerns became moot when the decision was made not to ask the identity of sexual partners, and to conduct the interviews in the student's homes. Subsequently, the Utah State IRB approved the study with the changes indicated. Parents and those interviewed were assured that the names of those interviewed would not be disclosed, and the individual responses given in the interviews would be kept in strictest confidence. These assurances have been and will continue to be honored.

C. Sample Selection

The focal group of the study included pregnant, or formerly pregnant, high school girls. They were the target sample because the study centered on describing the personal and social characteristics that may have contributed to their pregnancy. The key

question that needed to be addressed, however, was not "what are they like", but "how are they different from their peers." In order to know how pregnant and formerly pregnant adolescents differed from their nonpregnant peers, it was necessary to sample both groups and compare them. It would be of little value to know the characteristics of pregnant adolescents without knowing how they differed from their peers who were not pregnant. As Brandt, Kane and Moan (1978, p. 790) pointed out, "Many investigators have tried to elucidate the critical factors underlying pregnancy in unmarried adolescents. Unfortunately, almost all such studies lack nonpregnant control groups to provide comparable data or objective measuring devices...."

In our view, it was essential to devote the major effort of the study to comparisons of pregnant and nonpregnant girls in Utah high schools. Consequently, the largest and most complex sampling was a cross section drawn to be representative of high school students in the state of Utah. Although some students in the cross section had been involved in teen pregnancy, the cross sectional sample was conceived and selected primarily to provide comparisons to the pregnant or formerly pregnant girls who usually do not attend regular high school classes.

Technically speaking, the cross sectional student sample was a multi-stage, proportional stratified random sample. The first step was to stratify Utah high schools by their size classifications (4A, 3A, 2A, 1A). Then, in order to assure a representative sample from high schools of various sizes and locations, separate random

samples were drawn within each size classification using a table of random digits. The schools in each size classification from which sample was selected are shown in Table 3.

Within the schools selected, the next step was to draw a sample of students from each school who could be interviewed at home. The number of students selected in each size classification was to be proportional to the number of students in the state attending schools of that size. Given a total cross sectional sample of approximately 300 to be interviewed, it was calculated that 56 students would be selected from each of the 4A schools, 30 from each of the 3A schools, 13 in the 2A schools, and 2 in the 1A schools. This number of interviews from the different size schools would provide the appropriate proportions to be representative of the state secondary school system.

In the 12 sampled schools complete student name lists were usually acquired. Sometimes these lists were the student directories printed and provided to the studentbody. In cases where no directories were available, school administrators provided name lists. If the name lists were divided into senior, junior, and sophomore classes, the sampling was carried out within each grade level.

As mentioned earlier, the study's conceptualization had been broadened to include an analysis of both males and females. Consequently, this phase of the sampling included the names of both males and females randomly drawn as a cross-section of 12 different high schools, which had also been randomly drawn from all high schools in the state.

Table 3

PUBLIC HIGH SCHOOLS IN UTAH

Class 4-A (1400 + students)

1. Box Elder (1758)
2. Sky View (1807)
3. Clearfield (1572)
4. Davis (1573)
5. Layton (1620)
6. Cottonwood (2586)
7. Granger (2089)
8. Granite (1559)
9. Kearns (1962)
10. Olympus (1945)
11. Skyline (1947)
12. Alta High (2020)
13. Bingham (2481)
14. Brighton (2669)
15. Orem High (2224)
16. Hillcrest (2443)
17. Bonneville (1469)
18. Weber (1620)
19. East High (1946)
20. Highland (1797)
21. South High (1527)
22. West High (1782)
23. Provo High (1456)
24. Timpview (1410)

Class 3-A (600 - 1400 students)

1. Bear River (680)
2. Carbon High (833)
3. Bountiful (1376)
4. Viewmont (1348)
5. Woods Cross (1184)
6. Cypress (1303)
7. Cedar City (724)
8. American Fork (1052)
9. Lehi High (702)
10. Pleasant Grove (803)
11. Jordan (1324)
12. Payson (730)
13. Spanish Fork (957)
14. Springville (854)
15. San Juan (608)
16. Tooele (1382)
17. Dixie (884)
18. Roy (1398)
19. Uintah (806)
20. Ben Lomand (1236)
21. Ogden (1314)
22. Logan (843)
23. Murray (1234)

Class 2-A (200 - 599 students)

1. East Carbon (210)
2. Altamont (232)
3. Duchesne (328)
4. Union (407)
5. Emery (470)
6. Panguitch (213)
7. Grand High (550)
8. Parowan (243)
9. Beaver (262)
10. Juab (300)
11. Kanab (327)
12. Delta (481)
13. Millard (412)
14. Morgan (460)
15. No. Sanpete (328)
16. No. Summit (328)
17. Monticello (337)
18. Park City (238)
19. Piute (209)
20. Whitehorse (344)
21. North Sevier (331)
22. Richfield (444)
23. South Sevier (481)
24. Gunnison Valley (273)
25. Manti (328)
26. So. Summit (364)
27. Dugway (233)
28. Grantsville (518)
29. Wasatch (463)
30. Hurricane (478)

Class 1-A (fewer than 200 students)

1. Manila High (75)
2. Tabiona (68)
3. Green River (159)
4. Bryce Valley (118)
5. Escalante (104)
6. Milford High (157)
7. Valley High (132)
8. North Rich (64)
9. South Rich (115)
10. Tintic (136)
11. Wendover (120)
12. Enterprise (170)
13. Wayne (146)

The target sample of pregnant girls was identifed in several ways. During the first week of June, teachers of Young Mothers programs throughout the state attended the Utah Vocational Education Conference on campus at Utah State University. The project director arranged to meet with them and explain the study. It was explained that 12 schools throughout the state had been selected for a cross-sectional survey of high school students and some of the young mothers teachers would be needed to identify pregnant girls who attended or formerly attended those same 12 schools. As a group, the teachers were very interested and cooperative. Some of these teachers of young mothers programs were able to provide assistance, and some were not. In short, some school and district administrators cooperated and provided the information, and some expressly instructed their teachers not to release the information. In several cases the pregnant sample had to be identified through personal community contacts who knew one or more girls who had been pregnant during the last year or so. Upon contacting these girls and conducting the interviews, it was usually possible to learn the names of other girls in that school who had been pregnant. Although more cumbersome and time consuming, this "snowball" sampling technque usually allowed us to identify as large a sample as in the schools where administrative assistance was given.

The pregnant girls identified as explained above were not, obviously, a random sample. Some had experienced pregnancy a year or more previously, some were parents, some were married, and some

were no longer in school. They were, however, selected from the same age range (16-18) and from the same 12 high schools as their randomly chosen peers. In short, this sample was very diverse, but with one element in common: all had become pregnant in high school.

D. Instrumentation and Pretesting

The areas or domains of content to be included in the survey were initially identifed in the request for proposal issued by the Utah State Office of Education. A preliminary draft of the instrument was submitted with the proposal in November. When the contract was signed in December, the research team (expecting to begin collecting data in January) began intensive work refining items to measure the variables within the specified content areas. Based on suggestions in the RFP and on the results of two somewhat similar studies (Brandt, et. al., 1978; Goldfarb, et. al., 1977) the interview schedule was developed around the following content areas:

- demographic characteristics
- friend and peer relations
- family background and relations
- school background and achievement
- personal values and feelings
- religious feelings and behavior
- sexual attitudes and behavior

In mid-December the project director forwarded a copy of the revised instrument to the project monitor, indicating that the areas of content had been covered. In late December the agency monitor

mailed several pages of items that were also to be considered for inclusion in the instrument. Based on subsequent discussions between the research team and project monitor the interview schedule in Appendix A was completed.

One of the schools in the sample was considered an ideal location to pretest the procedures and protocols because it is close to the research team. The list of names randomly drawn from this school's Student Directory were divided up among the research team and each of us piloted techniques for approaching parents and interviewing adolescents. Within a week it was apparent that gaining consent from parents and cooperation from adolescents would not be an insurmountable problem. Consequently, arrangements were made to go ahead with a general interviewer training session. The interview form was also slightly revised as a result of this pretest experience. For example, the pretest revealed that some questions assumed every adolescent lived with their father, mother, and siblings, when of course, some young people had not.

E. Interviewer Training

Personnel to conduct the interviews were hired and trained by the project staff. Both intuitively and from the pretest experience, it was thought that a middle aged or older person might be more effective than someone younger in gaining the consent of parents for the interviews to take place. By far the more important criteria, however, were an effective personal style and professional maturity.

In some cases the interviewers were associated with the target school, so additional cautions were taken to prevent even the appearance of school involvement in the study. Interviewers who had school ties were instructed not to use school facilities, equipment, or time to arrange or conduct the interviews. We wanted it to be clear that the high schools were not involved in conducting the study.

Arrangements were made with USU Extension to hold an initial training session in their Salt Lake City center. The meeting was held May 15 at 7:00 p.m. Those present would interview students from the twelve schools:

School 1	Two interviewers present
School 2	One present, another trained later
School 3	One identified but not present
School 4	No one yet identified
School 5	One identified but not present
School 6	Research team
School 7	No one yet identified
School 8	Research team
School 9	One present, another trained later
School 10	One present, another trained later
School 11	One present
School 12	One identified but not present

The training session provided an opportunity for interviewers to have the study explained to them first hand, to ask questions

and clarify ambiguities, to be oriented to the interview form and other materials, and to be instructed in telephoning, interviewing, and record keeping. The outline of the meeting, which lasted about 90 minutes, was as follows:

Overview of the study . . . . . Brent Miller
Sampling Explanations . . . . . Tom Peterson
Telephoning Guidelines . . . . . Anne Weiner
Interviewing Techniques . . . . . Marie Krueger
Record Keeping and Summary . . . . . Brent Miller

Even though all interviewers had not even been identified at the time of the training session, it was considered essential to do as many interviews as possible before school was over at the end of May. Interviewers who were not present at the initial meeting received similar training on an individual basis from a member of the research team.

F. Data Collection and Processing

The actual process of data collection with the cross sectional sample was as follows. Parents of the sampled students were first sent a cover letter (see Appendix B) explaining the purpose of the study, how their son or daughter had been chosen, and asking for their cooperation when an interviewer contacted them. About one week after mailing the letters, the interviewer called and asked to speak to the parent(s). During their training session, interviewers

had been given guidelines about what to say (see Interviewer Guidelines in Appendix C). Interviewers referred to the letter which had been sent out in advance, answered any questions the parent(s) had, assured them of the integrity and confidentiality of the study, and asked permission to interview their son or daughter. Most often interviewers would then make arrangements with the son or daughter to be interviewed. There were, of course, many complications and exceptions.

Upon arriving for the scheduled interview, the interviewer reviewed the "Assurances" made by the project director and secured the parent(s) written consent for the interview to be conducted (see Appendix D). The interviewer then conducted the interview of the adolescent son or daughter in the most private possible surroundings in the parent's home.

The method of administration was to read the question to the student and mark the number of their response in the blanks along the right margin (see interview protocol). Because of the extensive pretesting the instrument had been through, it performed very well. At the bottom of page 8, the interviewer read the following instructions to the student: "There is one page of personal questions remaining which you should fill out privately. When you are done, just fold your questionnaire and put it in this envelope." After reading this statement, the interviewer handed a pencil, envelope, and the interview form to the student. Interviewers were instructed to make themselves as unobtrusive as possible while the

student filled out the final page and sealed their form in the envelope. When the student was finished, the interviewer thanked them for their cooperation, took the sealed envelope and informed consent form, and left the home.

Toward the end of the week following the training session the project director contacted the interviewers to see what problems had been encountered and what progress had been made. Because this week coincided with the last week of school in many districts, interviewers had generally made very little progress because of their own and the students involvement in activities related to graduation and the ending of school.

It soon became apparent, especially in the larger schools where many interviews needed to be done, that additional interviewers were needed. Over 20 interviewers were involved in collecting the data in the 12 locations.

Data collection was very difficult because of the timing of the study. The USOE provided a written ammendment to the original contract on May 4, and the research team was able to acquire some operating funds through the College of Family Life by the middle of May. Interviewers were hired and trained, and interviewing began during the last two weeks of May. This was, obviously, an extremely busy time for high school administrators and students, especially for those involved with graduation. This caused some delays in getting the interviews completed, and in virtually all of the 12 school districts sampled, interviewing continued into June.

Conducting interviews in the summer brought problems of its own. Students leaving home for various reasons and lengths of time (e.g., sheep herding, gone away to college, staying in Oregon for the summer) made it difficult to achieve as high a response rate as would have been attained if the study was conducted during the school year.

Interviewing difficulties were even more pronounced in trying to locate and interview pregnant and formerly pregnant girls. By marrying and/or moving from their parent's home, many of them had changed their name, address, and phone number.

Data collected from each respondent were coded and keypunched directly from individual interview forms in an effort to eliminate transpositional errors. The Statistical Package for the Social Sciences (SPSS) accessed at the Utah State University Computer Center was used to perform the statistical analyses. Since the interview forms were submitted by the interviewers in an anonymous fashion, data fed into the computer was accessible only by case number.

III. Results

A. Responses and Completion Data

Table 4 summarizes the completion data of interviews in the study. A total of 254 interviews were conducted, including 199 interviews of students randomly drawn from school name lists and 55 girls who had been identified as pregnant or formerly pregnant.

Although obtaining 199 of the 303 targeted cross-sectional interviews is about a two-thirds completion rate, the completion rate of students actually available for the study was approximately 75 percent. Student directory entries had been used as the sampling frame, especially in the larger schools, and this directory information, collected early in the fall, was badly outdated by May. An estimated seven percent of the sampled students were no longer going to the school at the time of the study. In one case the sampled student had been killed in a December automobile accident, and his parents called the project director to explain this after receiving the introductory letter to parents. The unavailability of students, due primarily to mobility, was a greater problem in the larger schools sampled as can be seen from the lower completion percentages in the third column of Table 4.

An estimated 75 percent completion rate for students actually attending the school does not mean that fully 25 percent refused to participate. In many cases the parents and students were willing to

Table 4

INTERVIEW COMPLETION BY SCHOOL SIZE CLASSIFICATION

	Random Cross Section			Interviews Completed Among Girls Identified as "Pregnant"
	Students Selected	Interviews Completed		
4-A Division				
School 1	56	33	(59%)	11
School 2	56	35	(63%)	5
School 3	56	36	(64%)	4
Subtotals	168	104	(62%)	20
3-A Division				
School 1	30	18	(60%)	7
School 2	30	20	(66%)	7
School 3	30	22	(73%)	9
Subtotals	90	60	(66%)	23
2-A Division				
School 1	13	10	(77%)	3
School 2	13	11	(85%)	2
School 3	13	8	(62%)	3
Subtotals	39	29	(75%)	8
1-A Division				
School 1	2	2	(100%)	2
School 2	2	2	(100%)	1
School 3	2	2	(100%)	1
Subtotals	6	6	(100%)	4
TOTALS	303	199	(66%)	55

participate, but making arrangements, especially in the summer, was impossible. Some of the students took extended vacations in the early summer, some had difficult work schedules or locations, and a few seniors left early for college summer school. It was not possible to calculate an exact percentage of "refusals" because a few interviewers did not keep precise enough records that accounted for the disposition of every case. Clearly though, fewer than one contact in five (20 percent) resulted in a refusal.

B. Coital Experience Reasons and Age

Table 5 shows that 21 of the 109 females (19.3%) and 22 of the 90 males (24.4%) in the cross-sectional sample had experienced coitus at least once. Of course all 55 of the females identifed in the "pregnant" sample reported having intercourse. Their higher percentage of responding "many times" must be viewed with the understanding that about half of the pregnant sample are or have been married. The greater interest in the present study is comparisons between those who have had intercourse at all (76 females and 22 males) and those who have not.

For analyzing the data, it was decided to group together females who had coital experience, whether they had been included in the cross-sectional or pregnant samples. In this way parallel comparisons could be made for both male and female subjects, between the characteristics of students who had experienced coitus and those who had not. This analysis rationale underlies most of the following

Table 5

COITAL EXPERIENCE AMONG
ADOLESCENTS IN THE SURVEY

Ever Had Sexual Intercourse?	Cross Sectional Sample		Pregnant Sample
	Female	Male	
No, never	86	68	0
Yes, once	8	9	6
Yes, several times	9	7	17
* Yes, many times	6	6	32*
TOTALS	109	90	55

* There is an unwarranted tendency to view those who reported having intercourse "many times" as being promiscuous, particularly those in the pregnant sample. Actually, 39 of the 49 girls in the pregnant sample who reported having intercourse more than once had been married. Similarly, three of the males had been married, but none of the females in the cross sectional sample had been.

tables which are broken down by sex and coital experience. In other words, the characteristics of all females who had experienced coitus (cross-sectional and pregnant samples combined) were compared to the characteristics of the females who had not. Similarly, males who reported having coitus were compared to the males who had not.

The reasons given for having coitus the first time are summarized in Table 6. Some interesting differences by sex can be seen. Females were most likely (42%) to say that they first had coitus because of pressure from their partner, although a substantial percentage (38%) indicated that they "just wanted to experience it." Over 80 percent of the boys reported that they "just wanted to experience it," with a sizeable minority saying that they were "just curious." In keeping with prevailing cultural roles of adolescent males and females, few males in our sample reported pressure by their partner as a reason for their first coital experience. Surprisingly, the naive answer "didn't know what was happening" was given as often by males as females. Males were more than twice as likely as females to report that alcohol or drugs played a part in their first coital experience.

Table 7 provides a breakdown of student's ages when intercourse first occurred. The average (mean) age of first intercourse for girls was 15.4, with 16 being the age most often mentioned (mode). For males, the average (mean) age of first intercourse was 15.2, and 15 was the age most frequently given. One girl at age six and two boys at ages nine and ten, were involved in sexual encounters that most likely included older partners. We did not ask the identity,

Table 6

REASONS GIVEN FOR HAVING FIRST INTERCOURSE*

Reasons	Females (n = 76)	Males (n = 22)
Pressured by partner	42.1%	13.6%
Wanted to experience it	38.2%	81.8%
Just curious	25.0%	40.9%
Didn't know what was happening	14.5%	18.2%
Been drinking or on drugs	11.8%	22.7%

* In response to the question "What were the main reasons for your first intercourse taking place? Check all that apply and write out any reasons not given." Columns do not add to 100 percent because more than one response could be checked.

Table 7

AGE AT FIRST INTERCOURSE

Age	Females n	Females %	Males n	Males %
6	1	(1.3)	-	
9	-		1	(4.5)
10	-		1	(4.5)
12	2	(2.7)	-	
13	4	(5.3)	-	
14	8	(10.7)	2	(9.1)
15	16	(21.3)	8	(36.4)
16	26	(34.7)	5	(22.7)
17	18	(24.0)	3	(13.6)
18	-		2	(9.1)
missing	1	(1.3)	-	
	76	(100%)	22	(100%)

even in general terms, of the sexual partner, but these data raise the question of incestous relationships.

C. Demographic Characteristics

The demographic characteristics of adolescents who had and had not experienced sexual intercourse are displayed in Table 8. As expected, those who had intercourse were older by about one year than their counterparts in the study. These data are consistent with common sense and virtually all studies in the literature which find that sexual experience becomes more likely among older adolescents as a progressive kind of sexual socialization. Work status appears to be no different for abstinent and sexually experienced males, but there appear to be large differences among the females. This difference should not be interpreted as a causal factor, however, because it is likely that the lower percentage of employed girls among the sexually experienced group is a consequence of some of them being mothers. In the area of parental education, however, there are clear differences that cannot be the result of the adolescent's having become pregnant. Those who have experienced sexual intercourse, both males and females, are less than half as likely as their abstinent peers to have a father who graduated from college. A similar pattern is observed for mother's education among males, but not females. The percentage of adolescents who reported their religion as Mormon is partucularly different in the comparison between males who have and have not experienced coitus. A smaller percentage of Mormon males

Table 8

DEMOGRAPHIC CHARACTERISTICS OF ADOLESCENTS
WHO HAVE AND HAVE NOT HAD COITAL EXPERIENCE

Interview Response	Female		Male	
	Had Coitus (n=76)	Not Had Coitus (n=86)	Had Coitus (n=22)	Not Had Coitus (n=68)
Average age now	17.24	16.53	17.23	16.11
Working part or full time	43.4%	63.9%	81.9%	79.1%
Father graduated from college	19.7%	37.3%	15.0%	45.5%
Mother graduated from college	26.7%	29.1%	4.8%	25.4%
Percent Mormon	81.6%	90.7%	59.1%	85.3%
Single, never married	48.7%	100.0%	81.8%	100.0%
Live with both father & mother	39.5%	81.4%	59.1%	88.2%

had had intercourse than those who reported affiliations with other denominations or no affiliation. There was a parallel finding for females, but not as strong.

All of those who had not experienced coitus were single (never married). Almost half of the females who had experienced coitus had been married, and about one out of five of the males who had coital experience reported being, or having been, married. These differences in marital status explain the apparent differences in who adolescents were currently living with. Although only 39 percent of the females who had coital experience were now living with both mother and father, 40 percent of them were living with a spouse. The same was true for males.

In summary, the only clear demographic differences between the youth who had and had not experienced sexual intercourse were that the sexually experienced tended to be older, a lower proportion of their parents, especially fathers, had completed college, and a lower proportion, especially the males, reported themselves to be of the Mormon religion.

D. Friend, Peer, and Dating Relations

Table 9 summarizes the interview data about friendships, peer relations, and dating experiences. Only those items on which the sexually active and abstinent teens were most different will be highlighted in the narrative. There was an unexpected interaction by sex in the relationship between number of friends and coital experience. Females who had experienced coitus were less likely to report that they

Table 9

FRIEND, PEER, AND DATING RELATIONS OF ADOLESCENTS WHO HAVE AND HAVE NOT HAD COITAL EXPERIENCES

Interview Response	Female		Male	
	Had Coitus (n=76)	Not Had Coitus (n=86)	Had Coitus (n=22)	Not Had Coitus (n=68)
Have lots of close friends	28.9%	43.0%	40.9%	27.9%
Most close friends of same sex	55.3%	68.6%	36.4%	71.6%
Can confide everything in best friend	59.2%	64.0%	54.5%	38.8%
Known best friend most of my life	30.3%	33.7%	38.1%	32.0%
Feel closer to friend of same sex than anyone	23.7%	42.4%	40.9%	38.8%
View self as very popular	9.2%	5.8%	9.1%	8.8%
Average age dating began	14.79	15.38	14.22	15.18
Never dated before high school	33.8%	60.5%	13.6%	73.1%

had "lots of close friends" than their abstinent peers, but sexually experienced males more often reported having "lots of close friends" than their counterparts. Lower percentages of sexually experienced males and females reported that most of their close friends were of the same sex; in other words, those who were sexually active reported more close friends of the opposite sex. Feeling that they could confide everything in their best friend did not appear to differentiate the abstinent and experienced girls in the sample, but a higher percentage of sexually experienced males reported being able to confide everything than did the abstinent males. Feelings of closeness to their same sex friend and their perceived popularity did not seem to be any different among experienced and abstinent males. Females who had experienced intercourse were much more likely to view themselves as being very popular, and less likely to report that they were closer to a friend of the same sex than anyone else. Sexually experienced girls were more likely to report being close to a boyfriend or husband than a same sex friend. With regard to dating, the response of males and females tell the same story; those who had been sexually active had begun dating in junior high school; in the case of males, almost a full year earlier than their abstinent peers.

In summary, the friend, peer, and dating profile for sexually experienced female adolescents is viewing oneself as being popular, having more than usual number of friends of the opposite sex, beginning to date earlier than her peers, usually in junior high school, and, perhaps, having fewer and less close friends of the same

sex. The last characteristics must be considered cautiously, however, because many of the sexually experienced females were married and might have responded differently to questions about current same sex friendships. For boys, the picture is one of having more than the usual number of close friends who are also trusted confidants, having more than the usual number of opposite sex friends, and beginning dating in junior high school about a year earlier, on the average, than their abstinent peers.

E. Family Relations

The family relations comparisons of adolescents who had and had not experienced coitus are summarized in Table 10. Surprisingly, the sexually experienced of both sexes were more likely to report feeling "very close" to their siblings. Thereafter, the pattern of differences between those who had and had not experienced coitus was different for males and females.

The female profile was stikingly consistent. A lower percentage of sexually experienced females reported that their personal achievements were very important to their parents, that their own relation with mother and father was very close and warm, that their parent's marriage was very close, that they enjoyed doing things with their family, that communication with parents was always open, and that their parent's discipline was strict and consistent. It is clear from these lower percentages that the family relations of sexually active adolescent females were notably less positive than was the case among their abstinent peers.

Table 10

FAMILY RELATIONS OF ADOLESCENTS WHO HAVE AND HAVE NOT HAD COITAL EXPERIENCE

Interview Response	Female		Male	
	Had Coitus (n=76)	Not Had Coitus (n=86)	Had Coitus (n=22)	Not Had Coitus (n=68)
Very close to siblings	25.3%	18.6%	22.7%	13.6%
Parents always encouraged bringing friends home	48.0%	50.0%	50.0%	33.8%
My personal achievements were very important to parents	30.7%	41.9%	54.5%	41.8%
Relation with father very close and warm	27.0%	34.5%	27.3%	28.4%
Relation with mother very close and warm	46.1%	54.7%	50.0%	44.1%
Parents marriage relation very close and warm	37.0%	50.0%	47.6%	52.2%
Family did most everyday things all together	40.0%	39.5%	54.5%	49.3%
Enjoyed doing things with my family	52.0%	69.8%	59.1%	61.2%
Communication with father was always open	9.2%	17.4%	13.6%	27.9%
Communication with mother was always open	25.0%	41.9%	31.8%	35.3%
Parents discipline was very strict	9.2%	16.3%	31.8%	17.6%
Parents discipline was very consistent	28.9%	47.7%	31.8%	50.0%

The profile of sexually experienced males was less expected and less consistent. Sexually active or abstinent males were less different in their evaluations of relations with father, their parent's marriage, the frequency and enjoyment of family activities, and openness of communication with mother. More than their abstinent peers, experienced males reported that: parents encouraged them to bring friends home (maybe girl friends!), their personal achievements were very important to their parents, relations with mothers were very close, and parent's discipline was very strict. However, less than half the percentage of sexually active males (compared to abstinent males) reported that communication with father was always open and that parent's discipline was very consistent.

In summary, the picture of family relations of sexually experienced females was consistently of lower quality than their sexually abstinent peers. The same cannot be said for males because of the mixed pattern of responses to the items as compared to their abstinent counterparts.

F. School Background and Achievement

The school-related comparisons of adolescents who had and had not experienced intercourse are displayed in Table 11. With the exception of participation in extracurricular activities and vocational education classes, all of the items included in this section of the interview were effective discriminators between those who had and had not experienced intercourse. This was true for both males and females in a theoretically consistent way.

Table 11

SCHOOL-RELATED CHARACTERISTICS OF ADOLESCENTS
WHO HAVE AND HAVE NOT HAD COITAL EXPERIENCE

Interview Response	Female		Male	
	Had Coitus (n=76)	Not Had Coitus (n=86)	Had Coitus (n=22)	Not Had Coitus (n=68)
Percent Seniors	62.7%	47.7%	68.2%	47.1%
In same grade as age mates	72.4%	86.0%	63.6%	85.0%
Consider self "A" student	21.1%	38.4%	4.5%	30.9%
Grades reflect abilities very well	17.1%	26.7%	4.5%	23.5%
Very important to parents to get good grades	52.0%	64.0%	54.5%	64.2%
Lots of extracurricular activity	28.0%	47.7%	50.0%	48.5%
Schools met my personal needs very well	18.2%	37.2%	17.1%	25.0%
Now taking Vocational Education course(s)	60.5%	46.5%	27.3%	32.0%
Plan to go to college	32.4%	65.5%	33.3%	55.2%

Roughly two-thirds of those who were sexually experienced were seniors, as compared to about half of those who were abstinent. Eighty-five percent of those who had not had intercourse were in the same grade as their age mates, compared to only 72 and 63 percent of the sexually active females and males respectively. This was not particularly surprising for the girls because some of them had become mothers and were more likely to have fallen behind in school. However, the grade-level discrepancy was even more pronounced for the sexually experienced boys, only 3 of whom were married. Admittedly the numbers are small, but 6 of the 22 (27%) sexually experienced males were behind their grade level in school; 20 percent of the girls who had experienced intercourse were behind their grade level. The item asking students to appraise their academic standard reinforces the grade level finding above. The proportion of sexually active females who considered themselves "A" students (21%) was about half of the abstinent girls (38%), and only one sexually active boy out of 22 considered himself an "A" student as compared to about one out of three among the sexually abstinent peers.

In a similarly consistent way, both sexually active females and males were less likely to report that their grades reflected their abilities well, and that it was very important to their parents that they get good grades in school. Consistently with expectations for both sexes, sexually active adolescents were also less likely to say that schools had met their personal needs well and that they planned to go on to college. The lower percentage of sexually

experienced females planning to go to college might be considered an artifact of there being mothers in this group. However, an almost identical pattern was present among the male students, few of whom were married. The sex differences that appear in the lower involvement of girls in extracurricular activities and the greater percentage taking vocational education courses are, however, likely to be attributable to motherhood.

In summary, more consistent across sex than any area or domain yet analyzed, the school background and achievement of adolescents clearly differentiates between those who have and have not experienced sexual intercourse. It is evident that outstanding students, male or female, are much less likely to become involved in early sexual intercourse or pregnancy.

G. Religious and Responsibility Orientations

The religious and responsibility orientations of students compared in Table 12 show remarkable differences between those who have and have not experienced coitus. Like the educational differences these are consistent for both sexes, but their magnitude is generally even greater.

About two-thirds to three-quarters of the abstinent teens attend church weekly or more, as compared to only 13 percent of the sexually experienced males and 31 percent of the experienced females. Anticipating this difference for the females, and thinking that it might be partially due to the social stigma incurred after

Table 12

RELIGIOUS AND RESPONSIBILITY ORIENTATIONS AMONG ADOLESCENTS WHO HAVE AND HAVE NOT HAD COITAL EXPERIENCE

Interview Response	Female		Male	
	Had Coitus (n=76)	Not Had Coitus (n=86)	Had Coitus (n=22)	Not Had Coitus (n=68)
Attend church once a week or more	31.6%	77.9%	13.6%	67.6%
Attended church weekly two years ago	42.1%	80.2%	36.4%	75.0%
Consider self to be very religious	19.7%	58.1%	22.7%	35.3%
Marriage and family most important ties	97.4%	95.3%	95.5%	100.0%
Responsible only to self for personal behavior	72.4%	67.4%	63.6%	73.5%
Responsible to parents for personal behavior	51.3%	65.1%	53.5%	66.1%
Responsible to society for personal behavior	33.1%	47.7%	54.5%	61.7%
Responsible to God for personal behavior	59.2%	75.5%	63.7%	80.9%

coitus (and in some cases pregnancy), we also asked elsewhere in the interview about frequency of church attendance two years ago. Consistent with our expectations, attendance was higher two years ago among all groups. Considering present attendance and attendance two years ago, the difference in church attendance between experienced and abstinent girls also remained about the same. Not surprisingly, those who were sexually active, and who attended church less often, were less likely to consider themselves to be very religious. The perception of the importance of marriage and family ties was the only item in this section that did not discriminate between those who had and had not been sexually active.

In considering their responsibility to self, parents, society, and to God, the adolescents generally responded in the expected direction. Sexually experienced females felt less responsibility to parents, society, and to God, and slightly more responsibility to self only. Sexually experienced males responded similarly except that they were, inexplicably, somewhat less likely to report feeling responsible to self only.

In summary, the indicators of religious activity and attitude very strongly and clearly distinguished between sexually active and abstinent adolescents of both sexes. Perceptions of responsibility were also consistently related to whether or not adolescents had experienced sexual intercourse, but less strongly than the responses about religion.

H. Sexual Education and Attitudes

The data in Table 13 about sexual education and attitudes among the sexually experienced and abstinent are not particularly surprising, but they are important and serve to reinforce underlying hypotheses that guided the formulation of these interview questions. In virtually every comparison of the sexually active and abstinent, parents of the sexually active adolescents were less involved in educating their children about sex and the information they provided was viewed as less adequate than that provided by parents of abstinent teens. In addition, sexually active youth of both sexes were more likely to have had an older sister who became pregnant before marriage. They were also less inclined to think that petting and intercourse before marriage are "very wrong", and much more likely to have friends who have petted and experienced intercourse. The data provided from this section of the interviews provide a remarkably consistent picture of the sexual background of young people who have sexual intercourse during their high school years.

The only data in Table 13 which are somewhat unanticipated is that sexually active males were older than their abstinent peers when they first learned about the female menstrual period. Similarly, sexually active females were older than their abstinent peers when they first learned about sexual intercourse. This finding is, however, consistent with the finding of Goldfarb et. al. (1977) that pregnant adolescents were likely to have learned about sex later than their peers and from someone other than their parents. These data are

Table 13

SEXUAL EDUCATION AND ATTITUDES ABOUT SEX AMONG ADOLESCENTS WHO HAVE AND HAVE NOT HAD COITAL EXPERIENCE

Interview Response	Female		Male	
	Had Coitus (n=76)	Not Had Coitus (n=86)	Had Coitus (n=22)	Not Had Coitus (n=68)
Average age first learned about menstruation	10.67	10.66	12.5	11.8
Learned about menstruation from parents	35.5%	44.2%	22.7%	22.7%
Parent's teaching about menstruation was adequate	82.9%	93.0%	59.1%	72.0%
Age first learned about sexual intercourse	11.92	11.38	11.45	11.41
Learned about intercourse from parents	21.1%	36.0%	13.6%	26.5%
Parents teaching about intercourse was adequate	70.0%	76.8%	54.6%	85.0%
Had sister who became pregnant before marriage	18.4%	12.8%	13.6%	2.9%
Think petting before marriage is wrong	25.0%	54.7%	13.6%	44.1%
Most of my friends have petted	67.1%	8.1%	68.2%	14.7%
Have engaged in petting one or more times	97.4%	23.3%	90.9%	33.3%
Think intercourse before marriage is very wrong	38.2%	81.4%	13.6%	63.2%
Most of my friends have had sexual intercourse	38.2%	4.7%	40.9%	3.0%

consistent with the pattern of less open communication identified earlier as being more characteristic between sexually active adolescents and their parents.

Self Esteem

Eleven items from Coopersmith's (1962) self esteem scale were administered during the interview (See appendix A, items 55-66). These items were summed into an index and analyzed for internal consistency. The item "tough to be like me" was dropped during the reliability analyses, raising the alpha coefficient of internal consistency to .78. When the data were examined by sex and whether or not subjects had experienced intercourse, however, no differences were found between those who were sexually experienced and abstinent. (See Table 14).

Note

The data reported in this Results section have been selective, often highlighting differences between the sexually experienced and abstinent only on certain response categories. Complete breakdowns of the responses are provided in Appendix E.

Table 14

SELF ESTEEM OF ADOLESCENTS WHO HAVE AND HAVE NOT HAD COITAL EXPERIENCE

Level of Self Esteem	Female		Male	
	Had Coitus (n=76)	Not Had Coitus (n=86)	Had Coitus (n=22)	Not Had Coitus (n=68)
High	17.1%	15.1%	18.2%	16.2%
Medium	60.5%	65.1%	63.6%	70.6%
Low	22.4%	19.8%	18.2%	13.2%
Average self esteem score*	30.71	30.98	29.27	32.00

* Sum of 10 items with possible response range from 1-4. See Appendix A, items 55-65.

IV. Summary and Conclusions, Limitations and Recommendations

A. Summary and Conclusions

A cross section of male and female students was drawn from high schools in Utah by first randomly selecting 12 high schools in the state (three from each of the four size classifications), and then randomly sampling among the students in these schools. Approximately 75 percent of the interviews were completed with students who could have been interviewed. A total of 199 cross-sectional interviews were obtained, 109 with females, and 90 with males. Fifty-five young women of the same ages (16-18) who attended the same 12 high schools, but who had been pregnant, were also included in the survey. Interviewers conducted all 254 face-to-face interviews of adolescents with their parent's consent and in their own homes. Data were analyzed by comparing females who had experienced coitus with those who had not, and similarly by comparing males who had intercourse with those who had not.

Interviews were aimed at assessing a variety of attitudes and experiences as possible explanations of sexual activity among high school age adolescents. Results showed that, in comparison with sexually active peers, both male and female students who had not experienced sexual relations:

- were younger, less likely to be seniors
- had parents with more education
- were more likely to be Mormon

- had begun dating later
- had less friends of the opposite sex
- had more open communication with parents, especially with fathers
- felt that their parent's discipline was more consistent
- were less likely to be a grade behind in school
- were more likely to consider themselves to be "A" students
- were more likely to think that their grades reflected their abilities
- were more likely to think it was very important to their parents for them to get good grades in school
- were more likely to feel that schools had met their personal and social needs
- were more likely to have plans to go on to college
- attended church more often, currently and 2 years ago
- considered themselves to be more religious
- felt more responsible to parents, society, and God for their personal behavior
- were more likely to learn about intercourse from their parents
- were more likely to feel that sex education from parents was adequate
- were less likely to have an unmarried sister who became pregnant
- were more likely to think petting and intercourse before marriage is wrong
- were less likely to have close friends who had petted and had coitus

There were some characteristics on which the sexually active males and females were different. Females who had been sexually active, as compared to their sexually abstinent counterparts, were less likely to say that they had lots of close friends but more likely to say that they were popular. This apparent discrepancy might be because they were gauging their popularity by attention they received from males, rather than from their same sex peers. One teacher of a young mother's program indicated that most of the girls in their area who become pregnant are very good looking. "You look across a class of them and they're beautiful little girls." Sexually active boys, on the other hand, reported having more close friends who were closer confidantes than was the case among their abstinent counterparts.

The domain of family relations was an area where sexually experienced males and females were particularly different. Males who had experienced coitus were more likely to say that their parents had encouraged them to bring friends home, that their personal achievements were very important to parents, and that their parents discipline was very strict. None of these were true for sexually experienced females, who felt that their personal achievements were less important to parents, that their parent's marriage was less warm, that they did not enjoy doing things with their family, and that their parent's discipline was less strict. These sex differences reflect, perhaps, the double standard in American society. Boys who are sexually active

are less deviant, in a sense, than sexually active girls who appear more likely to have strained family relations.

The findings of the present study are remarkably consistent with the empirical generalizations gleaned from the literature review. Chilman's (1980b) summary of variables associated with nonmarital intercourse is included again as Table 15, this time with plus signs in the left margin showing where the findings of the present study are concordant with previous research.

Nothing found in the present study was in direct conflict with results obtained in other studies summarized in Table 15. The question mark beside single parent family means that it was not possible to evaluate, given that we measured this variable as present family living arrangement, and half of the females who had experienced coitus were living with husbands. Similarly, the self esteem data in the present study do not line up in agreement with the table, being lower for sexually active females but not males. However, Chilman indicated that her summarization in this case was based on only one or two small studies. Overall, variables which appear in the literature summarizing table which were measured in the present study, were found to be highly concordant.

There were, of course, several areas where the present research extends the list of variables related to having had sexual intercourse. Some of these are the early initiation of dating relationships, feelings of responsibility to other people and institutions, and the source, age and effectiveness of sex education.

Table 15

CONCORDANCE (+) OF UTAH STUDY WITH MAJOR FACTORS APPARENTLY ASSOCIATED WITH NONMARITAL INTERCOURSE AMONG ADOLESCENTS

Factors	Males	Females
Social Situation		
+ Father having less than a college education	unknown	yes, for blacks
+ Low level of religiousness	yes	yes
Norms favoring equality between the sexes	probably	yes
Permissive sexual norms of the larger society	yes	yes
Racism and poverty	yes	yes
Migration from rural to urban areas	unknown	yes
Peer-group pressure	yes	not clear
Lower social class	yes (probably)	yes (probably)
+ Sexual permissive friends	unknown	unknown
? Single-parent (probably low-income) family	unknown	yes
Psychological		
+ Use of drugs and alcohol	yes	no
? Low self-esteem	no[a]	yes[a]
Desire for affection	no[a]	yes[a]
+ Low education goals and poor educational achievement	yes	yes
Alienation	no[a]	yes[a]
Deviant attitudes	yes	yes
High social criticism	no[a]	yes[a]
+ Permissive attitudes of parents	yes[a]	yes[a]
+ Strained parent-child relationships and little parent-child communication	yes	yes
Going steady; being in love	yes[a]	yes[a]
Risk-taking attitudes	yes[a]	yes[a]
Passivity and dependence	no[a]	yes[a]
Aggression; high levels of activity	yes	no[a]
+ High degree of interpersonal skills with opposite sex	yes[a]	no[a]
Lack of self-assessment of psychological readiness	no[a]	yes[a]

(Continued on next page)

Table 15 (Continued)

CONCORDANCE (+) OF UTAH
STUDY WITH MAJOR FACTORS APPARENTLY ASSOCIATED WITH
NONMARITAL INTERCOURSE AMONG ADOLESCENTS

Biological		
+ Older than 16	yes	yes
Early puberty	yes	yes (probably for blacks)

[a]Variables supported by only one or two small studies. Other variables are supported by a number of investigations. The major studies on which this table is based are: Furstenberg (1976); Jessor and Jessor (1975); Sorenson (1973); Kantner and Zelnik (1972); Udry et al. (1975); Simon et al. (1972); Zelnik and Kantner (1977); Fox (1980); Cvetkovich and Grote (1975); Presser (1978).

Source: Chilman, 1980b

B. Limitations and Recommendations

The survey data imply that parents, schools, and churches all could play a part in the reduction of adolescent sexual activity and pregnancy. The data are, however, based on a relatively small sample (especially males who have had intercourse).

The sample also is deficient in the sense that it does not include those who have dropped out earlier in high school, nor does the sample of girls who have been pregnant include girls who have had abortions in proportion to their actual numbers in the population.

It must also be acknowledged that the present research has shown only associations between a variety of characteristics and adolescent coital experience. Causal mechanisms must be better understood for intervention or prevention programs to be maximally effective. It is logically possible, for example, that problems in the parent-child relationship are as much, or more, a consequence of adolescent sexual activity as its cause. Similarly, lower church activity and feelings of religiosity might be the result of having been sexually active, rather than the cause of sexual behavior. These alternative explanations have been raised where appropriate in the present research, and often they cannot be ruled out.

In a related vein, the insights of teachers of young mother's programs are used below to illustrate and highlight some cautions about interpreting the present data. Their insights are qualitative impressions, rather than the quantified variables reported elsewhere in the findings. But they serve to remind us of the diversities and

differences that are otherwise often obscured in the kind of reporting we have done so far. Hard data from surveys usually emphasize the patterns and regularities rather than the differences and variability which also exist. Although our survey data have allowed us to develop a profile of adolescents who are most likely to be sexually active and involved in teen pregnancy, little has been noted about the diversity among these young people.

Quotes from the tape recorded interviews with young mother's teachers will serve to illustrate this point. When asked to describe how those who became involved in adolescent pregnancy were different from their peers, one teacher said:

> "If you had to identify one main problem of all these girls, it's their self image and self esteem. I think the best birth control you could give them would be to have a program that would build up their self esteem so that they wouldn't give in to the first boy that comes along."

> By contrast, another teacher said that of their young mothers this year "all have above average self esteem, including studentbody officers. One girl is the vice president of the senior class, one was the vice president of her junior class, and one of the boys who fathered a child had been named as the outstanding senior boy."

In the total sample, of course, self esteem did not show up as a characteristic that was any different among those who had experienced coitus and those who had not. It might be, however, that in some schools a support system develops that favors and fosters a girl with high self esteem becoming sexually active and pregnant. In another community and school, the environment might be such that girls with the highest self esteem are least likely to become pregnant.

On a more general level, some teachers felt that there was no discernable pattern or type of young person that became involved with teen pregnancy. One teacher said:

"Are they different? I don't think so. They are so normal to me. When I first came into the program I thought they would be different. They would be greasy, dirty, carrying knives, on drugs. But they're not. It just happens to anybody who lets their guard down. They are just a bunch of hurt girls."

Another teacher who had been teaching young mothers for over a decade, felt confident in describing the most typical situation:

"You see a pattern where there is trouble in the family, and they are not communicating there. They are having trouble with their parents because they won't do their lessons. And they they are dating and they seem to find solace someway in this boyfriend in an intimate relationship. Now that's been a very definite pattern."

With the above discrepancies and reservations about the data and their interpretation firmly in mind, the following ideas and recommendations are offered in conclusion. These suggestions come primarily from the interviews with teachers of young mothers programs, who of all people, ought to have insights into possibilities for reducing the incidence and effects of adolescent pregnancy.

- Whatever it is, it has got to start really early.
- Maybe hearing some of the pregnant girls talk. Hear some of their experiences, that it's not all fun and games. Hear about your skin, hair, weight, and stretch marks during pregnancy. The reality is not as glamorous as the kids think.
- Some of our teen mothers wrote a little thing for their school friends called "Twenty Steps to Teenage Pregnancy." It didn't come from teachers or old fashioned parents, but from young

girls themselves. It included things like:

- start dating young
- don't tell your parents where you are going
- where immodest clothing
- have your boyfriend pick you up after school and don't go home

° Have coed classes that help kids understand each other. Girls say that boys are responsible for getting them pregnant, but the boys say no, it was the girls fault for not drawing the line. Boys will go as far as the girls let them. Girls think that boys are in control, and boys think that limits are up to the girls.

° A lot of peer pressure goes into keeping babies. We need to help change the attitude that keeping the baby proves your love and that you are a good mother. Some are so young that they need to realize that adoption is another way to go. They could pick up their lives and make something of it. Give themselves a chance to find a good husband, good marriage. I think right now that they all feel a tremendous social pressure to keep the babies.

° If we could get them out of those restrooms and off the parking lots and find out what the problem is and why they are sluffing, and right then bring the family in to counsel them. And bring the young people in, get them back in their classes to keep them achieving academically and to be part of

> the social group. But when they start pulling away you can see them drifting out. Because invariably they are sluffing and you can almost go down the hall and you can see them sluffing and you say 'within two or three months they will be in our program.' They are so attracted to each other, hiding around in the halls and necking and petting. And after school getting into cars and driving off. Just this spring there were three couples we identified, senior boys and younger girls. Sure enough, all three have become pregnant."

In summary, this research has generated a profile of young people in Utah who are most likely to be sexually active and involved in teen pregnancy. Their characteristics are remarkably similar with what has been found in studies conducted elsewhere. As the quotes from teachers of the young mothers have illustrated, however, those involved in teen pregnancy are not all alike, although there are similarities. The recommendations suggested above barely begin to address solutions to this problem. No reference is made to contracteption, the role of churches, and only minimal reference is made to the relationship that might be established between parents, educators, and other community resources to help young people understand their sexuality and deal with it responsibly.

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APPENDIX A

Interview Schedule

(Interviewer's name)

UTAH ADOLESCENT SURVEY

Section A - Background Information

INTERVIEWER: PLEASE OBSERVE AND RECORD RESPONDENT'S SEX AND RACE

I.D. number(leave blank) ____

- Respondent's sex:
  1. male
  2. female ____

- Respondent's race:
  1. white
  2. black
  3. hispanic
  4. oriental
  5. native American
  6. other ____

---

1. How old are you? ..... ____

2. What grade are you in school?
   1. 10th grade
   2. 11th grade
   3. 12th grade ____

3. Do you have a regular paid job, part or full time?
   1. not working
   2. parttime
   3. fulltime ____

4. Are you now taking a vocational education course like occupational food services, textiles and clothing, or child care?
   1. yes
   2. no ____

5. Do you have any plans for future schooling?
   1. not graduate from high school
   2. graduate from high school
   3. trade/or vocational school
   4. college
   5. graduate or professional degree
   6. don't know ____

5. What is your father's present occupation? _____

INTERVIEWER: WRITE OUT WHAT OCCUPATION IS, OR WAS (IF DECEASED, DIVORCED) _____ ____

7. What grade of education did your father complete?
   1. not graduate from high school
   2. graduated from high school
   3. attended trade/vocational school
   4. attended college
   5. college graduate
   6. graduate or professional degree
   7. don't know ____

8. What grade of education did your mother complete?
   1. not graduate from high school
   2. graduated from high school
   3. attended trade/vocational school
   4. attended college
   5. college graduate
   6. graduate or professional degree
   7. don't know

   ____

9. What is your mother's present occupation?_____

   _____ ____

10. What is your religion?
    1. Catholic
    2. Jewish
    3. Mormon
    4. Protestant
    5. Other
    6. No affiliation

    ____

11. Look at card #1 and tell me who you are living with now.

    INTERVIEWER: SHOW CARD #1 TO SUBJECT

    1. both your father and your mother
    2. your mother
    3. your father
    4. your mother and step father
    5. your father and step mother
    6. alone
    7. with one or more friends of opposite sex
    8. with one or more friends of same sex
    9. with spouse
    10. with spouse and children
    11. with foster parents
    12. other (please specify)

    ____

12. How many older brothers do you have? ..... ____

13. How many older sisters do you have? ..... ____

14. How many younger brothers do you have?..... ____

15. How many younger sisters do you have? ..... ____

16. Are you currently
    1. single, never married
    2. married (go to question 20)
    3. divorced
    4. separated
    5. other (please specify)

    ____

17. Do you anticipate marriage in the future?
    1. yes
    2. no
    3. not sure

    ____

    INTERVIEWER: ONLY ASK THIS QUESTION IF RESPONDENT IS NOT CURRENTLY MARRIED

18. If yes: "How Soon?"

1. within next year
2. within next 2 years
3. within 3 years
4. 4 years +
5. Not sure, don't know

19. If no or not sure: "Why not?"

INTERVIEWER, WRITE OUT REASONS

Section B - Friends and Peers

20. How many really close friends do you have? Do you have:

1. No really close friends,
2. one or two close friends,
3. three or four close friends, or
4. lots of close friends?

21. Are most of your close friends girls or boys?

1. girls
2. boys
3. about equal number boys and girls

22. Think about being able to depend on and confide in your very best friend. With your very best friend, would you say that you are:

1. not close enough to confide too much,
2. pretty close, able to confide most things, or
3. very close, able to confide everything?

23. How long have you been friends with your very best friend?

1. for less than a year,
2. for several years, or
3. for most of your life?

24. Of the individuals listed on card #2, who do you feel the closest to?

INTERVIEWER: SHOW CARD #2 TO RESPONDENT AND MARK WHO STUDENT IS CLOSEST TO.

1. friend of same sex
2. friend of opposite sex
3. spouse
4. children
5. religious leader
6. father
7. mother
8. brother
9. sister

25. Would you say that you are

1. not too popular
2. moderately popular, or
3. very popular?

Section C - Family Background

26. How well did you get along with your brothers and sisters, in general, while you were growing up? Were your relationships
    1. distant
    2. neutral
    3. close, or
    4. very close?
    5. had no brothers or had no sisters ____

27. Did your parents encourage you to bring friends home
    1. never,
    2. rarely,
    3. sometimes, or
    4. always? ____

28. How important was it to your parents that you get good grades in school? Was it
    1. not important,
    2. important, or
    3. very important? ____

29. How important were your personal achievements (such as sports, dance or music) to your parents? Were they
    1. not important,
    2. important, or
    3. very important? ____

30. How was your relationship with your father (step or foster father) while you were growing up? Was it
    1. distant and cool,
    2. neutral with no feeling,
    3. close and warm, or
    4. very close and warm?
    5. not applicable (father not available) ____

31. How was your relationship with your mother (step or foster mother) while you were growing up? Was it
    1. distant and cool
    2. neutral, with no feeling
    3. close and warm, or
    4. very close and warm?
    5. not applicable (mother not available) ____

32. How would you judge the relationship your parents had with each other while you were growing up? Were they
    1. Always fighting with each other,
    2. emotionally cool but not fighting,
    3. close and kind to each other, or
    4. very close and loving?
    5. not applicable (both parents not available) ____

33. How much did your family do everyday things like eating meals and going places all together? Did you usually
    1. do things on your own,
    2. do some things on your own and some together, or
    3. do most things together as a family? ____

34. How much did you enjoy going places and doing things with your family? Did you
    1. not like it very much,
    2. think it was okay, or
    3. enjoy it a lot? ____

35. Were you able to talk openly with your father while you were growing up? Could you talk openly with him
    1. never,
    2. rarely,
    3. usually, or
    4. always?

36. Were you able to talk openly with your mother while you were growing up? Could you talk openly with her
    1. never,
    2. rarely,
    3. usually,
    4. always?

37. How strict was the discipline you received from your parents while growing up? Was it
    1. not very strict,
    2. moderately strict, or
    3. very strict?

38. How consistent was the discipline you received from your parents during your growing up years? Was it
    1. inconsistent,
    2. somewhat consistent, or
    3. very consistent?

39. About how old were you when you first learned about menustration or the female period?

40. How did you first learn about it?
    1. parent
    2. brother or sister
    3. friends
    4. school teacher
    5. religious leader
    6. printed or visual
    7. other

41. Would you say the information you received from your parents regarding menstruation was
    1. inadequate (none)
    2. adequate, or
    3. very adequate?

42. How old were you when you first learned about sexual intercourse between men and women?

43. What was the source of that information?
    1. parents
    2. brothers/sisters
    3. friends/peers
    4. teachers
    5. religious leaders
    6. printed or visual sources
    7. other (please specify)

44. Would you say the information you received from your parents regarding sexual intercourse between a man and woman was
    1. inadequate (none),
    2. adequate, or
    3. very adequate?

45. Do you have a sister who became pregnant while not married?

1. yes
2. no
3. don't know

Section D - School Background

46. At what age did you begin dating?

47. Which of the items listed on card #3 best describes your dating behavior before high school?

INTERVIEWER: SHOW RESPONDENT CARD #3

1. never dated
2. dated occasionally
3. dated frequently a number of different persons
4. dated frequently the same person
5. dated steadily the same person
6. I was engaged before high school

48. Which of the items on card #4 best typifies your current dating or marriage behavior?

INTERVIEWER: SHOW RESPONDENT CARD #4

1. I am not dating
2. I am dating occasionally
3. I am dating frequently a number of different persons
4. I am dating frequently the same person
5. I am steadily dating the same person
6. I am engaged
7. I am married
8. other (please specify)

49. Would you describe yourself as

1. an "A" student
2. a "B" student
3. a "C" student
4. a "D" student
5. a failing student?

50. Do your school grades reflect your abilities

1. very well
2. pretty well, or
3. not well at all?

51. Are you in the same grade as other students your age, or are you ahead or behind?

1. in same grade
2. ahead
3. behind

52. How much have you been involved in extracurricular school activities such as sports, drama, band, and so on? Have you had
    1. none,
    2. some, or
    3. lots of involvement in extracurricular activities? ___

53. Looking back, how well have schools met your personal and social needs? Has school met your needs
    1. very well
    2. pretty well, or
    3. not well at all? ___

Section E - Personal Characteristics and Values

54. Away from school, what do you do with most of your time?

INTERVIEWER: SHOW RESPONDENT CARD #5

1. work
2. play sports
3. watch sports
4. study or read
5. religious activities
6. cultural activities
7. T.V. radio or movies
8. just goof off
9. other ___

55. How often do you attend religious services now?
    1. never
    2. seldom
    3. once or twice a month
    4. once a week or more ___

56-66 Please rate each of the following eleven items using the responses on card #6.

INTERVIEWER: RESPONDENT CARD #6

Card Scale

1. most like me
2. like me
3. unlike me
4. most unlike me

56. I am pretty sure of myself ___
57. I often wish I were someone else ___
58. I am easy to like ___
59. I have a low opinion of myself ___
60. I am not much fun to be with ___
61. There are a lot of things about myself I would like to change ___
62. I often feel like a failure ___
63. I have a lot of fun with people ___
64. I am just as attractive as others I know ___
65. It's pretty tough to be like me ___
66. I am well liked ___

67. How do you feel about the following statements? "Marriage and family relations are the most important social tfes anyone can have. Do you
1. strongly disagree
2. disagree
3. agree
4. strongly agree

68. I am responsible to myself and no one else for my personal behavior.
1. strongly disagree
2. disagree
3. agree
4. strongly agree

69. I feel responsible to my parents for my personal behavior.
1. strongly disagree
2. disagree
3. agree
4. strongly agree

70. I feel responsible to society for my personal behavior.
1. strongly disagree
2. disagree
3. agree
4. strongly agree

71. I feel responsible to God for my personal behavior.
1. strongly disagree
2. disagree
3. agree
4. strongly agree

72. How often did you attend religious services two years ago?
1. never
2. seldom
3. once or twice a month
4. once a week or more

73. Do you consider yourself to be
1. not religious,
2. somewhat religious, or
3. a very religious person?

INTERVIEWER: READ THE FOLLOWING TO THE STUDENT

"There is one page of personal questions remaining which you should fill out privately. When you are done, just fold your questionnaire and put it in this envelope."

To the student: Your answers to the following questions will be kept strictly confidential. Your responses will be mixed with those of other students so no one will know how you answered. But please, be honest and truthful. Answer every question. Put the number of your response in the blank at the right margin.

74. How do you feel about teenagers petting (fondling each other's bodies) before marriage? Do you think it is--
1. very wrong
2. mostly wrong
3. neutral, up to individuals, or
4. good to pet? ____

75. How many of your friends have petted? Would you say that
1. none, or hardly any have petted
2. some have, but not most, or
3. most of your friends have petted ____

76. Have you ever petted?
1. no, never
2. yes, once or twice
3. yes, several times, or
4. yes, many times? ____

77. How do you feel about teenagers having sexual intercourse (full sex relations) before marriage? Do you think it is--
1. very wrong
2. mostly wrong
3. neutral, or
4. good to have sexual relations? ____

78. How many of your friends have had sexual intercourse (full sex relations) Would you say that--
1. none, or hardly any have had sex relations
2. some friends have, but not most, or
3. most friends have had sex relations? ____

79. Have you ever had sexual intercourse?
1. no, never
2. yes, once
3. yes, several times, or
4. yes, many times? ____

NOTE TO STUDENT: IF YOU HAVE ANSWERED "NO" TO QUESTION 79, YOU ARE FINISHED WITH THE QUESTIONNAIRE. PLACE YOUR QUESTIONNAIRE IN THE ENVELOPE. IF YOU ANSWERED "YES" TO QUESTION 79, PLEASE ANSWER THE REMAINING ITEMS.

80. Are you now or have you ever been pregnant? (circle one) yes no ____

81. At what age did you first have sexual intercourse? years of age ____

82. Where did your first intercourse experience take place? _____

83. What were the main reasons for your first intercourse taking place? Check all that apply and write out any reasons not given:
1. I was just curious ____
2. I didn't know what was happening ____
3. I wanted to experience sex ____
4. I was pressured by my partner ____
5. I had been drinking or on drugs ____
6. Other _____

THANK YOU VERY MUCH.

APPENDIX B

Introductory Letter to Parents

UTAH STATE UNIVERSITY · LOGAN, UTAH 84322
COLLEGE OF FAMILY LIFE

DEPARTMENT OF
FAMILY AND
HUMAN DEVELOPMENT
UMC 29

May 15, 1981

Dear Parent:

Many parents, political officials, school administrators, and religious leaders have expressed concerns about increasing teenage pregnancy in Utah. According to the Utah Department of Health, there has recently been a decline in teenage pregnancies nationally, but in Utah the rate has increased by almost one third. What, if anything, distinguishes young people who become involved in teenage pregnancy from those who do not?

Your son or daughter has been selected as one of a small number in Utah high schools to help provide some information and answers to this question. Because each participant has been selected at random from the entire state, your cooperation and your child's participation are essential. Otherwise, the results will not be truly representative of young people throughout the whole state.

Within a week one of our researchers will telephone you to make an appointment for an interview. The purpose of this visit will be to ask some questions privately, concerning family, social and educational background. You can be assured of complete confidentiality. No one's name or responses will ever be disclosed. The purpose of the study is to provide only a group picture of adolescents in Utah. A summary of these group results will be mailed to the home of every adolescent who participates.

Please feel free to write or call if you have any questions. My telephone number in Logan is 750-1552.

Sincerely,

Brent C. Miller, Ph.D.
Project Director

lr

APPENDIX C

Guidelines for Interviewers

Guidelines for Telephone Calls to Arrange Interviews

1. TALK TO THE PARENT	"Are you Mr. Jones?" "Is your mother or father home?"
2. IDENTIFY YOURSELF	"I'm _____, and I'm calling for the Utah State Office of Education who is conducting a study of adolescent pregnancy."
3. REFER TO PARENT'S LETTER	Say that you are calling in reference to a letter that they probably received in the last day or so. Did he/she receive the letter? In either case, go to point #4.
4. EXPLAIN STUDY PURPOSE	The purpose of the study is to gain a better understanding of adolescent pregnancy in the state.
5. RANDOM SAMPLE	Explain that the sample was scientifically selected to represent a cross-section of adolescents in the state (girls and boys; sophomores, juniors, and seniors; pregnant and non pregnant teenagers)
6. CONFIDENTIALITY	No one's name will be recorded or written on their interview; responses will be kept in strictest confidence. Only group data, not individual answers, will be reported.
7. ARRANGE APPOINTMENT	Obtain consent to interview the student, and set up a time for the interview. Verify the location if you are in doubt.
8. DON'T GIVE UP	If there is hesitancy or refusal, be persistent. Emphasize that the son or daughter is part of a scientific cross section, and their response is crucial. The interview will not be embarassing, will be private and confidential. Parents may read through the interview form if they want. If you still can't set an interview time, give your phone number and ask that they call you if they decide to participate in the survey.
9. THANKS	Thank the parent for the cooperation that was given and reconfirm the time and place set for the interview.

REMEMBER, IT IS CRUCIAL TO INTERVIEW EVERY STUDENT WHO WAS SELECTED. DO NOT USE SCHOOL FACILITIES OR TIME. INTERVIEWS ARE TO HAVE PARENT's PERMISSION.

APPENDIX D

Assurances and Informed Consent Form

UTAH STATE UNIVERSITY · LOGAN, UTAH 84322
COLLEGE OF FAMILY LIFE

DEPARTMENT OF
FAMILY AND
HUMAN DEVELOPMENT
UMC 29

12 May 1981

ASSURANCES

As director of this project, I certify that:

1. The reason for this study is to better understand adolescent pregnancy in Utah;
2. Your son or daughter's name was randomly drawn to represent a cross section of all high school students in the state;
3. Responses given in the interview will be kept in strictest confidence;
4. The names of those interviewed will not be disclosed.

B Smillie — Project Director

5/14/81 — Date

INFORMED CONSENT

As the parent of _____

I hereby give permission for this interview to take place.

_____ Parent's Signature

_____ Date

APPENDIX E

Codebook and Frequency Data

By Sex and Coital Experience

TEEN PREGNANCY CODEBOOK

COLUMN	VARIABLE NAME	DESCRIPTION
1-3	ID.	Identification Number
4	CARD	Card Number
5-6	INTERVUR	

Note: The following is a frequency distribution of responses given to each question on the interview schedule. Missing data not shown.

			Female			Male	
			Had Coitus	Not Had Coitus		Had Coitus	Not Had Coitus
7	SEX		76	86	Respondents Sex		
					1. male	22	68
					2. female		
8	RACE				Respondent's Race		
			74	82	1. white	22	64
			1	1	2. black	-	3
			1	2	3. hispanic	-	1
			-	-	4. oriental	-	-
			-	-	5. native American	-	-
			-	1	6. other	-	-
9-10	$\bar{X}$	AGE	17.24	16.54	Respondent's age in years	17.23	16.12
11		GRADE			Grade in School		
			8	18	1. 10th grade	2	32
			14	27	2. 11th grade	5	20
			50	41	3. 12th grade	15	16
12		PAIDJOB			Do you have a regular job?		
			43	31	1. not working	4	21
			22	45	2. parttime	10	31
			11	10	3. fulltime	8	15
13		VOCED			Are you taking a Vocational Course?		
			46	40	1. yes	6	22
			30	46	2. no	16	46

COLUMN	VARIABLE NAME			DESCRIPTION	77	
14	PLNSCHL			Do you plan on future schooling?		
		2	1	1. not graduate from high school	1	1
		25	11	2. graduate from high school	4	9
		16	13	3. trade/or vocational school	7	8
		22	55	4. college	7	37
		3	4	5. graduate or professional degree	2	12
		8	2	6. don't know	1	1
15	DADOCC			Father's present occupation		
16	DADED			Father's education		
		14	6	1. not graduate from high school	5	4
		28	29	2. graduated from high school	8	12
		6	4	3. attended trade/vocational school	4	6
		9	12	4. attended college	2	14
		9	20	5. college graduate	1	19
		5	12	6. graduate or professional degree	2	12
				7. don't know		
17	MOMED			Mother's education		
		17	7	1. not graduate from high school	4	3
		36	41	2. graduated from high school	11	24
		1	4	3. attended trade/vocational school	2	7
		12	16	4. attended college	3	14
		8	14	5. college graduate	1	16
		1	2	6. graduate or professional degree	1	1
		1	2	7. don't know	-	1
18	MOMOCC			Mother's present occupation		
19	RELIGION			What is your religion?		
		5	3	1. Catholic	2	6
		-	-	2. Jewish	-	-
		62	78	3. Mormon	13	58
		2	1	4. Protestant	2	-
		1	2	5. Other	2	1
		6	2	6. No affiliation	3	3
20-21	LIVEWITH			Who are you living with now?		
		30	70	1. both your father and your mother	13	60
		3	11	2. your mother	3	4
		-	-	3. your father	-	-
		5	2	4. your mother and step father	1	2
		-	-	5. your father and step mother	-	-
		2	-	6. alone	-	-
		-	-	7. with one or more friends of opposite sex	-	-
		1	-	8. with one or more friends of same sex	1	-
		17	-	9. with spouse	1	-
		13	-	10. with spouse and children	2	-
		-	1	11. with foster parents	1	1
		5	2	12. other (please specify	-	1

COLUMN		VARIABLE NAME			DESCRIPTION	78	
22	$\bar{X}$	OLDBRO	1.09	1.13	How many older brothers do you have?	.95	1.16
23	$\bar{X}$	OLDSIS	1.05	.93	How many older sisters do you have?	.68	.84
24	$\bar{X}$	YNGBRO	.82	1.08	How many younger brothers do you have?	.77	1.00
25	$\bar{X}$	YNGSIS	.76	.87	How many younger sisters do you have?	.54	.84
26		MSTATUS			Are you currently		
			37	86	1. single, never married	18	68
			33	-	2. married	3	-
			3	-	3. divorced	-	-
			3	-	4. separated	-	-
			-	-	5. other	1	-
27		MARRY?			Do you anticipate marriage in the future?		
			38	82	1. yes	17	63
			-	1	2. no	-	1
			3	3	3. not sure	3	4
28		MTIMING			If yes, "How soon?"		
			6	1	1. within next year	1	-
			3	4	2. within next 2 years	2	-
			4	23	3. within 3 years	3	3
			18	49	4. 4 years +	11	47
			9	6	5. Not sure, don't know	2	14
29		NFRIENDS			How many close friends do you have?		
			3	-	1. No really close friends	2	2
			26	17	2. one ot two close friends	6	18
			25	32	3. three or four close friends	5	29
			22	37	4. lots of close friends	9	19
30		FRNDSEX			Are most of your friends girls or boys?		
			42	59	1. girls	2	2
			5	2	2. boys	8	48
			29	25	3. about equal number boys and girls	12	17
31		FRNDCLOS			You can depend on and confide in your very best friend		
			7	2	1. not close enough to confide too much	3	4
			24	29	2. pretty close, able to confide most things	7	37
			45	55	3. very close, able to confide everything	12	26
32		FRNDYRS			How long have you been friends with your best friend?		
			6	6	1. for less than a year	2	4
			47	51	2. for several years	11	41
			23	29	3. for most of your life	8	22

COLUMN	VARIABLE NAME			DESCRIPTION	79	
33	CLOSETO			Who do you feel the closest to?		
		18	36	1. friend of same sex	9	26
		11	8	2. friend of opposite sex	5	9
		28	-	3. spouse	2	-
		2	-	4. children	-	-
		1	1	5. religious leader	-	-
		1	2	6. father	2	11
		11	27	7. mother	3	15
		1	3	8. brother	-	6
		3	8	9. sister	1	-
34	POPULAR			Would you say that you are		
		12	8	1. not too popular	3	6
		57	73	2. moderately popular	17	56
		7	5	3. very popular	2	6
35	SIBCLOSE			How well did you get along with your brothers and sisters?		
		3	1	1. distant	3	4
		19	21	2. neutral	4	15
		33	46	3. close	10	37
		19	16	4. very close	5	9
		1	2	5. had no brothers or had no sisters	-	1
36	BRNGHOME			Did your parents encourage you to bring friends home?		
		5	-	1. never	1	1
		5	3	2. rarely	3	4
		29	40	3. sometimes	7	39
		36	43	4. always	11	23
37	GRADEIMP			How important was it to get good grades in school?		
		2	1	1. not important	2	3
		34	30	2. important	8	21
		39	55	3. very important	18	43
38	ACHIMPT			How important were your personal achievements?		
		10	7	1. not important	2	7
		42	43	2. important	8	31
		23	36	3. very important	12	28
39	DADCLOSE			How was your relationship with your father?		
		12	3	1. distant and cool	5	1
		8	5	2. neutral with no feeling	3	10
		32	47	3. close and warm	8	36
		20	29	4. very close and warm	6	19
		-	2	5. not applicable	-	-

COLUMN	VARIABLE NAME			DESCRIPTION	80	
40	MOMCLOSE			How was your relationship with your mother?		
		2	2	1. distant and cool	1	-
		3	37	2. neutral, with no feeling	1	4
		4	47	3. close and warm	9	33
		32	-	4. very close and warm	11	30
		35	-	5. not applicable	-	-
41	PARCLOSE			How was your parents relationship with each other?		
		2	4	1. always fighting with each other	1	3
		10	8	2. emotionally cool but not fighting	3	11
		12	29	3. close and kind to each other	7	17
		22	41	4. very close and loving	10	35
		27	-	5. not applicable	1	1
42	FAMDO			How much did you family do everyday things together?		
		11	4	1. do things on your own	3	3
		34	48	2. do some things on your own and some together	7	31
		30	34	3. do most things together as a family	12	33
43	FAMENJ			How much did you enjoy doing things with your family?		
		9	1	1. not like it very much	-	1
		27	25	2. think it was okay	9	25
		39	60	3. enjoy it a lot	13	41
44	DADTALK			Were you able to talk with your father openly?		
		20	5	1. never	5	1
		17	21	2. rarely	5	8
		32	45	3. usually	9	40
		7	15	4. always	3	19
45	MOMTALK			Were you able to talk with your mother openly?		
		4	-	1. never	1	-
		14	7	2. rarely	2	6
		39	43	3. usually	12	38
		19	36	4. always	7	24
46	STRICTD			How strict was the discipline you received from your parents?		
		15	9	1. not very strict	2	5
		54	63	2. moderately strict	13	51
		7	14	3. very strict	7	12
47	CONSISTD			How consistent was the discipline you received from your parents?		
		13	5	1. inconsistent	3	4
		41	40	2. somewhat consistent	12	30
		22	41	3. very consistent	7	34

COLUMN		VARIABLE NAME			DESCRIPTION		81
48-49	$\bar{X}$	MENSTOLD	10.67	10.66	When did you learn about menustration? (What age?)	12.04	11.80
50		MENSTHOW			How did you first learn about it?		
			27	38	1. parent	5	15
			4	1	2. brother or sister	1	3
			12	13	3. friends	9	18
			18	20	4. school teacher	6	21
			-	-	5. religious leader	-	1
			13	13	6. printed or visual	-	5
			2	1	7. other	1	3
51		MENSADQ			Was the information you recieved from your parents regarding menstruation adequate?		
			13	6	1. inadequate (none)	9	10
			42	48	2. adequate	9	43
			21	32	3. very adequate	4	6
52-53	$\bar{X}$	INTEROLD	11.92	11.38	How old were you when you learned about sexual intercourse between men and women?	11.45	11.41
54		INTERHOW			What was the source of that information?		
			16	31	1. parents	3	18
			3	1	2. brothers/sisters	6	4
			43	42	3. friends/peers	9	23
			10	6	4. teachers	3	16
			-	-	5. religious leaders	-	2
			4	4	6. printed or visual sources	1	4
			-	2	7. other	-	1
55		INTERADQ			Was the information you received from your parents regarding sexual intercourse adequate?		
			22	20	1. inadequate (none)	10	17
			40	47	2. adequate	8	43
			14	19	3. very adequate	4	8
56		SISPREG			Do you have a sister who became pregnant while not married?		
			14	11	1. yes	3	2
			61	75	2. no	19	66
			1	-	3. don't know	-	-
57-58	$\bar{X}$	DATEAGE	14.80	15.38	At what age did you begin dating?	14.23	15.18

COLUMN	VARIABLE NAME			DESCRIPTION	82	
59	DATEJRHS			Which best describes your dating behavior before high school?		
		25	52	1. never dated	3	49
		26	25	2. dated occasionally	13	13
		7	5	3. dated frequenlty a number of different persons	3	3
		10	2	4. dated frequently the same person	2	1
		6	2	5. dated steadily the same person	1	1
		-	-	6. I was engaged before high school	-	-
60	DATENOW			Which best typifies your current dating or marriage behavior?		
		3	10	1. I am not dating	2	20
		9	29	2. I am dating occasionally	5	28
		10	28	3. I am dating frequently a number of different persons	5	5
		6	10	4. I am dating frequently the same person	1	10
		8	8	5. I am steadily dating the same person	4	4
		3	1	6. I am engaged	1	-
		36	-	7. I am married	4	-
		-	-	8. other	-	-
61	XSTUDENT			Would you describe yourself as		
		16	33	1. an "A" student	1	21
		35	39	2. a "B" student	11	32
		20	12	3. a "C" student	6	14
		4	1	4. a "D" student	3	1
		1	1	5. a failing student	1	-
62	GRADEREF			Do your school grades reflect your abilities?		
		21	11	1. very well	7	16
		42	52	2. pretty well	14	36
		13	23	3. not well at all	1	16
63	SAMEGRDE			Are you in the same grade as other students your age, or ahead or behind?		
		55	78	1. in same grade	14	58
		6	4	2. ahead	2	10
		15	4	3. behind	6	-
64	EXTRACUR			Are you involved much in extracurricular school activities?		
		19	13	1. none	3	10
		35	32	2. some	8	25
		21	41	3. lots of involvement in extracurricular activities	11	33
65	SCHNEEDS			Has school met your personal and social needs?		
		9	1	1. very well	1	1
		54	53	2. pretty well	17	50
		13	32	3. not well at all	4	17

COLUMN		VARIABLE NAME			DESCRIPTION	83	
66		FREETIME			What do you do with most of your free time?		
			25	27	1. work	10	23
			3	5	2. play sports	5	14
			-	1	3. watch sports	-	1
			3	5	4. study or read	-	7
			-	4	5. religious activities	-	-
			2	2	6. cultural activities	1	-
			7	14	7. T.V. radio or movies	1	5
			18	19	8. just goof off	4	12
			18	9	9. other	1	6
67		GOCHURCH			How often do you attend religious services?		
			18	6	1. never	5	6
			20	8	2. seldom	8	8
			14	5	3. once or twice a month	6	8
			24	67	4. once a week or more	3	46
68	$\bar{X}$	SURESELF	3.22	3.37	I am pretty sure of myself	3.38	3.50
69	$\bar{X}$	WISHELSE	2.07	2.21	I often wish I were someone else	2.09	2.15
70	$\bar{X}$	EASYLIKE	3.28	3.33	I am easy to like	3.29	3.28
71	$\bar{X}$	LOWOPIN	1.85	1.85	I have a low opinion of myself	1.62	1.65
72	$\bar{X}$	NOTFUN	1.72	1.73	I am not much fun to be with	1.90	1.91
73	$\bar{X}$	CHNGSELF	2.74	2.86	There are a lot of things about myself I would like to change	3.09	2.32
74	$\bar{X}$	FAILURE	2.05	1.98	I often feel like a failure	2.00	1.72
75	$\bar{X}$	LOTFUN	3.53	3.72	I have a lot of fun with people	3.33	3.57
76	$\bar{X}$	ATTRACT	2.99	2.91	I am just as attractive as others I know	3.19	3.09
77	$\bar{X}$	TOUGHME	2.58	2.39	It's pretty tough to be like me	2.71	2.38
78	$\bar{X}$	WELLIKED	3.13	3.28	I am well liked Card Scale for 68-78 1. most like me 2. like me 3. unlike me 4. most unlike me	3.19	3.31

COLUMN	VARIABLE NAME			DESCRIPTION		84
				CARD 2		
1-3	ID			Identification		
4	SEQ					
5	MARRIMPT			Feelings about statement: "Marriage and family relations are the most important social ties anyone can have. Do you		
		2	2	1. strongly disagree	1	-
		5	2	2. disagree	-	-
		30	29	3. agree	13	29
		39	53	4. strongly agree	8	39
6	RESPSELF			I am responsible to myself and no one else for my personal behavior.		
		3	8	1. strongly disagree	2	4
		18	20	2. disagree	6	14
		30	34	3. agree	5	33
		25	24	4. strongly agree	9	17
7	RESPARNT			I feel responsible to my parents for my personal behavior.		
		5	6	1. strongly disagree	4	3
		32	24	2. disagree	6	20
		34	41	3. agree	7	33
		5	15	4. strongly agree	5	12
8	RESPSOC			I feel responsible to society for my personal behavior.		
		16	13	1. strongly disagree	6	7
		35	32	2. disagree	4	19
		21	35	3. agree	12	36
		4	6	4. strongly agree	-	6
9	RESPGOD			I feel responsible to God for my personal behavior.		
		10	4	1. strongly disagree	1	3
		21	17	2. disagree	7	10
		27	34	3. agree	8	28
		18	31	4. strongly agree	6	27
10	CHURCH2Y			How often did you attend religious services two years ago?		
		10	3	1. never	4	2
		16	8	2. seldom	6	8
		18	6	3. once or twice a month	4	7
		32	69	4. once a week or more	8	51

COLUMN	VARIABLE NAME			DESCRIPTION	85	
11	RELIGOUS?			Do you consider yourself to be		
		11	4	1. not religious	3	6
		50	32	2. somewhat religious	14	38
		15	50	3. a very religious person	5	24
12	PETFEEL			How do you feel about teenagers petting before marriage?		
		19	47	1. very wrong	3	30
		20	18	2. mostly wrong	2	15
		35	21	3. neutral, up to individuals	15	22
		2	-	4. good to pet	2	1
13	PETFRNDS			How many of your friends have petted?		
		2	32	1. none, or hardly any have petted	1	26
		23	47	2. some have, but not most	6	32
		51	7	3. most of your friends have petted	15	10
14	PETYOU			Have you ever petted?		
		2	66	1. no, never	2	46
		16	15	2. yes, once or twice	5	16
		34	2	3. yes, several times	10	4
		24	2	4. yes, many times	5	2
15	INTRFEEL			How do you feel about teenagers have sexual intercourse before marriage?		
		29	70	1. very wrong	3	43
		18	7	2. mostly wrong	2	18
		27	9	3. neutral	15	6
		2	-	4. good to have sexual relations	2	1
16	INTRFRND			How many of your friends have had sexual intercourse?		
		6	52	1. none, or hardly any have had sex relations	1	51
		41	30	2. some friends have, but not most	12	14
		29	4	3. most friends have had sex relations	9	2
17	INTRYOU			Have you ever had sexual intercourse?		
		-	86	1. no, never	-	68
		13	-	2. yes, once	9	-
		25	-	3. yes, several times	7	-
		38	-	4. yes, many times	6	-
18	PREGNT	55 Y	-	Are you now or have you ever been pregnant?	2 Y	-
		20 N	-	(circle one) yes no	20 N	-
19-20	$\bar{X}$ INTERAGE	15.41	-	At what age did you first have sexual intercourse?	15.18	-

COLUMN	VARIABLE NAME	DESCRIPTION	86
		Where did your first intercourse experience take place?	
21	INTERWHY	What were the main reasons for your first intercourse taking place? Check all that apply and write out any reasons not given:	
19 -		1. I was just curious	9 -
11 -		2. I didn't know what was happening	4 -
29 -		3. I wanted to experience sex	18 -
32 -		4. I was pressured by my partner	3 -
9 -		5. I had been drinking or on drugs	5 -
22 -		6. Other_____	1 -